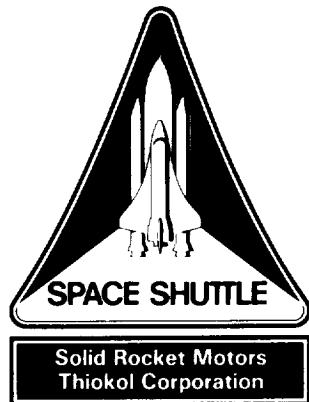


TWR-50181



# **Contractor's Final Documentation Report First Incremental Buy for Increment II of the Space Transportation System (STS)**

**December 1989**

Prepared for

National Aeronautics and Space Administration  
George C. Marshall Space Flight Center  
Marshall Space Flight Center, Alabama 35812

Contract No. NAS8-30490 (Schedule B)

DR No. 1-9

WBS No. 1.1 (HN)

***Thiokol*** CORPORATION  
**SPACE OPERATIONS**

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Publications No. 90280

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Contractor's Final Documentation Report

for

First Incremental Buy Increment II of the  
Space Transportation System (STS)

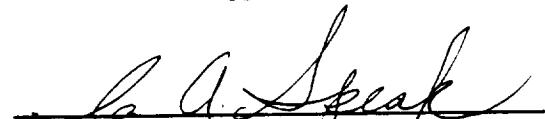
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Proposals

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Plans/Control

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Vice President  
RSRM Program Management

## CONTENTS

<u>Section</u>	<u>Page</u>
1 INTRODUCTION .....	1
2 DISCUSSION .....	5
3 STATEMENT OF WORK (IN PART) .....	6
3.1 INTRODUCTION .....	6
3.2 DELIVERABLE HARDWARE (SRM END ITEMS) .....	6
3.3 ACQUISITION OF SRM FLIGHT HARDWARE REUSABLE METAL PART INVENTORY .....	8
3.4 ACQUISITION AND SUSTENANCE OF TOOLING AND SUPPORT EQUIPMENT TO SUPPORT PLANNED PRODUCTION AND DELIVERY REQUIREMENTS .....	8
3.5 MANAGEMENT AND ENGINEERING .....	8
3.6 DELIVERABLE DATA .....	8
3.7 HARDWARE DELIVERY DATES (ON DOCK KSC DELIVERY) .....	8
4 WORK BREAKDOWN STRUCTURE .....	9
1.1.1 Solid Rocket Motor Buy 1 .....	9
5 CONCLUSIONS AND RECOMMENDATIONS OF PROGRAM .....	31
6 FLIGHT 7 AS-BUILT CONFIGURATION .....	32
7 FLIGHT 15 AS-BUILT CONFIGURATION .....	75

## FIGURES

<u>Figure</u>		<u>Page</u>
1	Work Breakdown Structure, Increment II, First Buy, SRM Schedule B .....	2
2	Program Master Schedule .....	3
3	Contract Closeout Letter .....	4
4	STS-7 Through STS-15, On-Dock KSC Delivery Dates .....	7
5	SRM Project Organization, June 1974 .....	10
6	Wasatch Division Organization, June 1974 .....	11
7	Thiokol Corporate Organization, June 1974 .....	12
8	Morton Thiokol, Inc. Corporate Organization, 1 Feb 1984 .....	13
9	Wasatch Division Organization, 1 Feb 1984 .....	14
10	Space Booster Program Organization, 1 Feb 1984 .....	16

## TABLES

<u>Table</u>		<u>Page</u>
1	Major Program Events .....	21
2	Subcontracting Procurement Overview .....	26

## APPENDIXES

<u>Appendix</u>	<u>Page</u>
A      Summary of Contract Modifications to S/A 610 Schedule B, Work Breakdown Structure HN .....	A-1
B      Contractor's Information Accessioning List for Space Shuttle Solid Rocket Motor Project .....	B-1
Part 1   Plans and Reports (TWR-series publications, serial numbers 10000 through 13999) .....	1-1
Part 2   Operation and Maintenance Documents (DR 3-8) .....	2-1
Part 3   Photographed and Motion Picture Film Clips (DR 1-13) .....	3-1

## ACRONYMS

ATP . . . . .	authorization to proceed
CDR . . . . .	critical design review
CEI . . . . .	contract end item
COQ . . . . .	certificate of qualification
DCN . . . . .	document change notice
DCR . . . . .	design certification review
DDT&E . . . . .	design, development, test, and evaluation
DPD . . . . .	data procurement document
DR . . . . .	data requirement
EDR . . . . .	engineering data requirements
FMEA/CIL . . . .	failure mode effects analysis/critical items list
GFE . . . . .	government-furnished equipment
GSE . . . . .	ground support equipment
ICD . . . . .	interface control document
IMS . . . . .	Information Management System
IRD . . . . .	information requirements document
JSC . . . . .	Johnson Space Center
KSC . . . . .	Kennedy Space Center
M&P . . . . .	materials and processes
MCCS . . . . .	Management Cost and Control System
MIC . . . . .	management information center
MSFC . . . . .	Marshall Space Flight Center
NASA . . . . .	National Aeronautics and Space Administration
OMD . . . . .	operations and maintenance document
PDR . . . . .	preliminary design review
SB . . . . .	Small Business
SDBC . . . . .	Small Disadvantaged Business Concern
SE . . . . .	support equipment
SRM . . . . .	solid rocket motor
SRMPO . . . . .	Solid Rocket Motor Project Office
SR&QA . . . . .	safety, reliability, and quality assurance
STE . . . . .	special test equipment
STS . . . . .	space transportation system
SWD . . . . .	subdivided work description

ACRONYMS (Cont)

TCTI . . . . . time compliance technical instruction  
TD . . . . . technical directive  
TSE . . . . . transportation support equipment  
WBS . . . . . work breakdown structure

## INTRODUCTION

This document was prepared in accordance with data requirement (DR) 1-9, information requirements document (IRD), data procurement document (DPD) 400, Contract NASA-30490, and contains a complete summary of work performed under the Buy 1 contract for the space shuttle solid rocket motor (SRM) during the period June 1974 through March 1984.

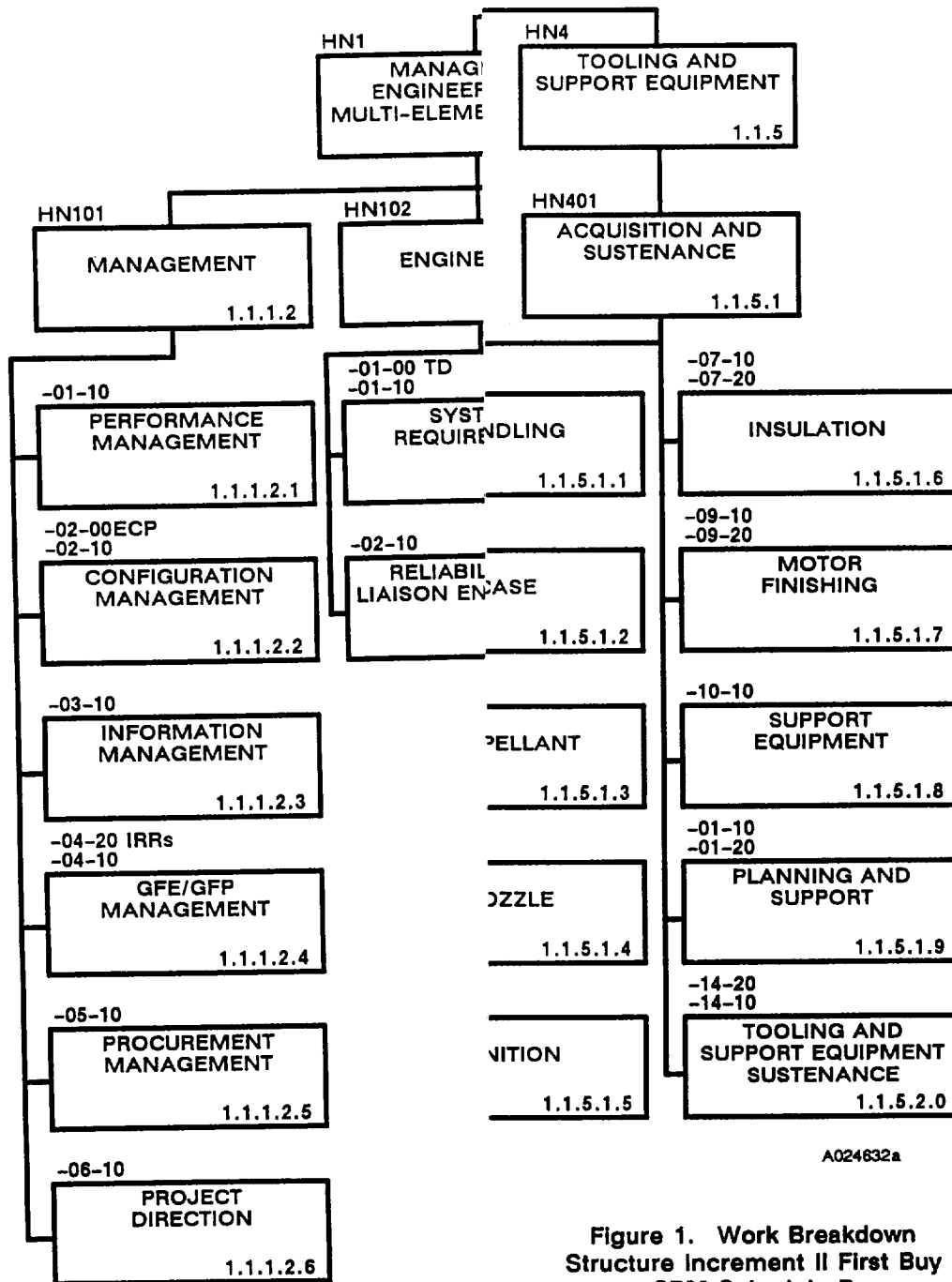
In accordance with a requirement of DR 1-9, the format of the document is keyed to the work breakdown structure (WBS). The NASA-assigned WBS under 1.1 is used, with the Wasatch Division WBS under the letters "HN" added as a cross reference. Figures 1 and 2 show how the contract work was subdivided and scheduled for optimum management for the SRM project.

No attempt has been made to provide details of actions, operations, designs, hardware, tests, or results. All entries are summary in nature with references for detail to applicable documents submitted to NASA/Marshall Space Flight Center (MSFC) throughout the period of performance and available in the Central Documentation Repository, CN22D, at MSFC.

Figure 3 is a copy of the contract NAS8-30490, Schedule B contract closeout letter AP46-396-89, dated 20 September 1989.

The requirement for use of the International System of Units has been waived for this document.



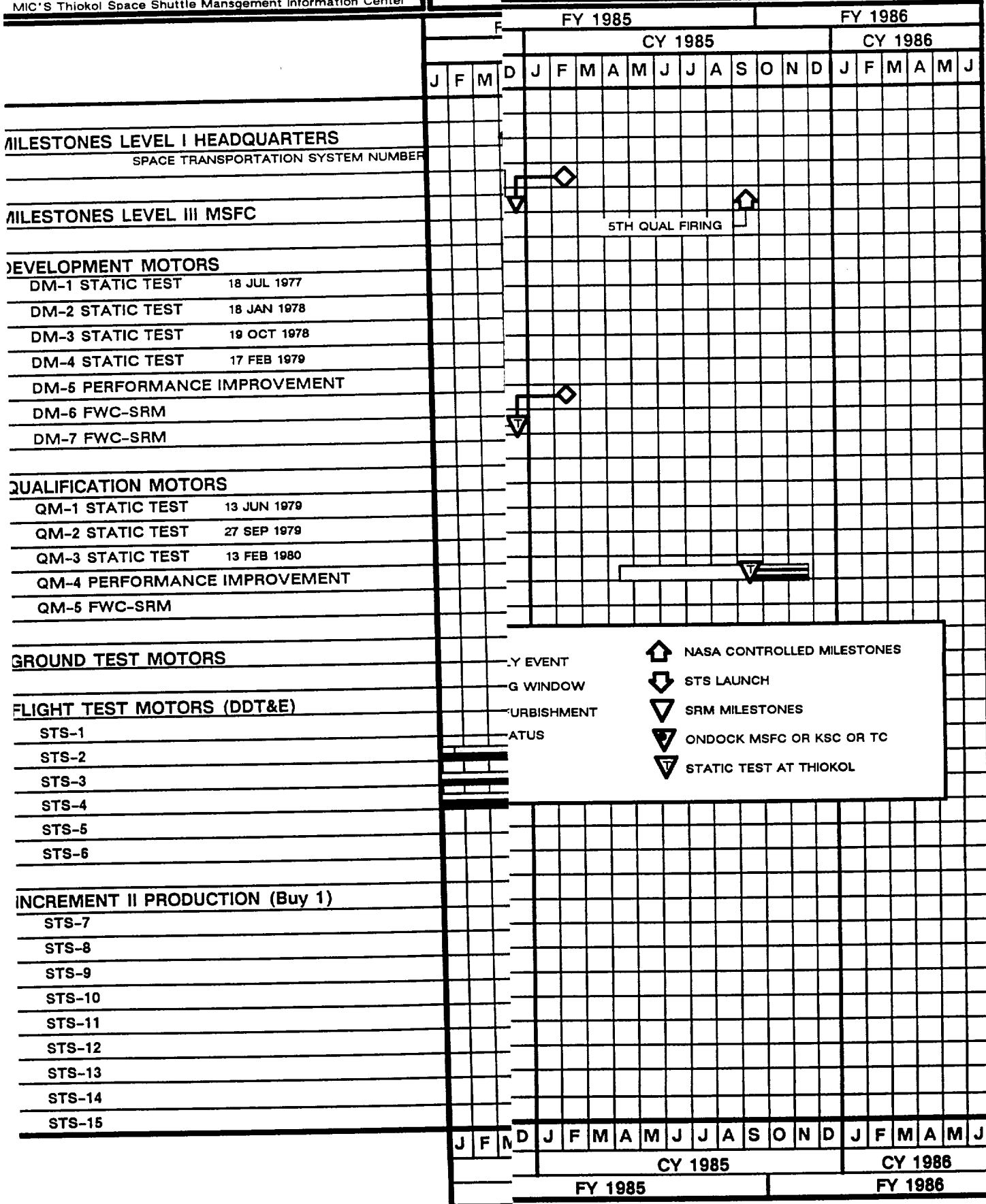


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Figure 1. Work Breakdown  
Structure Increment II First Buy  
SRM Schedule B

PROJECT MANAGER E. G. Dorsey  
 RESP I. C. Adams ORG Project Control  
 CONTACT R. F. McQuain EXT 3388  
 MIC'S Thiokol Space Shuttle Management Information Center

in STC and Change Order 610  
 Monthly TWR-11724-75



FOLDOUT FRAME

Figure 2. Program Master Schedule

National Aeronautics and  
Space Administration



George C. Marshall Space Flight Center  
Marshall Space Flight Center, Alabama 35812  
AC(205)544-2121

Reply to ATTN of: AP46-396-89

September 20, 1989

Thiokol Corporation  
Space Operations  
Attn: S. L. Littauer  
P.O. Box 707, M/S T02  
Brigham City, Utah 84302-0707

Subject: Contract NAS8-30490, Schedule B Contract Closeout.

Reference is made to Thiokol, Inc. letter T301-FY90-0208/PAW dated August 14, 1989 explaining The Nozzle Technology Advance Program (NTA) that was directed by Change Order 830 and requesting the program be officially cancelled if funding is not available to complete the work.

The Project Office has notified me that all effort under change order 830 is complete and all reports and data have been provided to MSFC. Therefore, Schedule B is complete and Thiokol can proceed to closeout that part of the contract, including billing of unpaid fees.


  
Emil L. Posey  
Contracting Officer



Figure 3. Contract Closeout Letter

REVISION \_\_\_\_\_

DOC NO.	TWR-50181	VOL
SEC	PAGE	4

## DISCUSSION

Thiokol provided labor, material, and services necessary to accomplish the scope of work as defined in Supplemental Agreement (S/A) 610 (Schedule B), dated 12 April 1983, and contract modifications as listed in Appendix A. The scope of work is as follows:

### Article B2-Scope of Work (in part)

The contractor will, on the terms and conditions hereinafter more particularly set forth, furnish the necessary management, labor, facilities, tools, materials and equipment and do all things necessary for performance of the work described below:

- a. Manufacture, assemble, and deliver space shuttle solid rocket motors in accordance with Exhibit A, Space Shuttle Solid Rocket Motor Statement of Work, First Incremental Buy for Increment II of the Space Transportation System.
- b. Provide solid rocket motor support equipment, tooling, and support parts in accordance with Exhibit B, Space Shuttle Solid Rocket Motor Provisioning Procedure for Support Equipment, Tooling, and Support Parts.
- c. Provide overhaul and/or repair of SRM components and related hardware in accordance with Exhibit C, Overhaul and Repair Procedure.
- d. Provide data in accordance with the IRD, DPD 400, as set forth in Exhibit A, Article B1-Scope of Work.

STATEMENT OF WORK (in part)

3.1 INTRODUCTION

Thiokol performed the requirements of the SOW for the First Incremental Buy for Increment II of the Space Transportation System (STS), which was governed by the following documents developed under the basic contract of the solid rocket motor (SRM) for the space shuttle:

- a. Management Plan, TWR-10191
- b. Configuration Management Plan, TWR-10150
- c. Development and Verification Plan, TWR-10212 (information purposes only)
- d. Safety Plan, TWR-10163
- e. Quality Plan, TWR-10161
- f. Reliability Plan, TWR-10162
- g. Procurement Management Plan, TWR-10194
- h. Integrated Logistics Support Plan, TWR-10306
- i. Materials Selection and Control Plan, TWR-10192
- j. Facilities Utilization Plan, TWR-10156
- k. Manufacturing Plan, TWR-10341

3.2 DELIVERABLE HARDWARE (SRM end items)

Thiokol manufactured, assembled, and delivered to KSC two each (one left hand and one right hand) SRMs for each of STS flights 7 through 15. Segment deliveries (Figure 4) met the contractual dates for the first 4 flights (S/A 610 and pertinent contract modifications noted in Appendix A); however, programmatic changes caused some delivery delays in the remaining flight sets. All deliveries met the KSC need dates. These SRMs met the following requirements:

Flight Motor Set

STS-7

STS-8 through 15

CEI Specification No.

CPW 1-3200, Parts I and II

Specification requirements as defined by S/A 505 of NAS8-30490, Schedule A.

The requirements of this paragraph were met on the use of previously flown/tested hardware from STS flights or the SRM development and qualification program.

Return and refurbishment of expended flight hardware from flights STS-1 through -10 (excluding STS-4), as well as refurbishment of hardware from DM-5, QM-4, and two casting segments damaged during the Buy 1 program, were accomplished under this SOW.

<p>AFT A C/A C/F FWD</p> <p>AFT B C/A C/F FWD</p>	<p><b>STS-7</b></p> <p>09 NOV 82 20 NOV 82 29 NOV 82 29 DEC 82</p> <p>12 NOV 82 22 NOV 82 24 DEC 82 29 DEC 82</p>	<p><b>STS-8</b></p> <p>03 MAR 83 31 MAR 83 05 APR 83 21 APR 83</p> <p>31 MAR 83 31 MAR 83 05 APR 83 18 APR 83</p>	<p><b>STS-9</b></p> <p>14 JUN 83 05 JUL 83 26 JUN 83 11 JUL 83</p> <p>13 JUN 83 26 JUN 83 05 JUL 83 11 JUL 83</p>	<p><b>STS-10</b></p> <p>15 AUG 83 22 AUG 83 22 AUG 83 15 AUG 83</p> <p>11 AUG 83 22 AUG 83 22 AUG 83 08 AUG 83</p>	<p><b>STS-11</b></p> <p>26 SEP 83 17 OCT 83 17 OCT 83 17 OCT 83</p> <p>26 SEP 83 10 OCT 83 31 OCT 83 24 OCT 83</p>
<p>AFT A C/A C/F FWD</p> <p>AFT B C/A C/F FWD</p>	<p><b>STS-12</b></p> <p>02 FEB 84 28 OCT 83 23 DEC 83 06 JAN 84</p> <p>02 APR 84 20 OCT 83 24 DEC 83 05 JAN 84</p>	<p><b>STS-13</b></p> <p>14 FEB 84 09 NOV 83 11 NOV 83 21 JAN 84</p> <p>15 FEB 84 21 JAN 84 13 JAN 84 21 JAN 84</p>	<p><b>STS-14</b></p> <p>29 FEB 84 22 FEB 84 29 FEB 84 02 MAR 84</p> <p>09 MAR 84 06 APR 84 06 APR 84 06 APR 84</p>	<p><b>STS-15</b></p> <p>15 MAY 84 10 APR 84 24 MAY 84 08 APR 84</p> <p>16 MAY 84 17 MAY 84 23 MAY 84 24 MAY 84</p>	

S.005

Figure 4. STS-7 Through STS-15, On-Dock KSC Delivery Dates

### 3.3 ACQUISITION OF SRM FLIGHT HARDWARE REUSABLE METAL PART INVENTORY

Thiokol acquired and delivered to inventory the following items of SRM flight hardware:

- a. SRM case hardware--230 case manufacturing segments
- b. SRM nozzle hardware--30 sets of nozzle metal parts
- c. Ignition system hardware--Metal parts, subassemblies and assemblies required to allow the buildup of 55 initiators, 20 arm and monitoring assemblies, 70 booster-barrier assemblies, and 41 igniters
- d. Miscellaneous metal parts--Parts, other than defined above, necessary to support the requirements of Para 1 of this SOW.

### 3.4 ACQUISITION AND SUSTENANCE OF TOOLING AND SUPPORT EQUIPMENT TO SUPPORT PLANNED PRODUCTION AND DELIVERY REQUIREMENTS

Thiokol did sustain the tooling and support equipment acquired under this basic contract for the Buy 1 of the space shuttle SRM necessary to satisfy the requirements of this SOW. In addition, Thiokol did acquire and maintain those additional tools and support equipment necessary to meet the production/delivery requirements of the schedule.

### 3.5 MANAGEMENT AND ENGINEERING

Thiokol provided for the effective management of the requirements of this SOW to include the production and delivery of the data required by the IRD, DPD 400, and any other provision of the contract. Thiokol did sustain/maintain the engineering baseline developed under this basic contract for the Buy 1 of the space shuttle SRM and provided the necessary support to the accomplishment of the requirements of this SOW to assure conformance to the engineering baseline, and demonstrated that product quality and reliability were maintained and not degraded.

### 3.6 DELIVERABLE DATA

Thiokol furnished documentation as listed in Appendix B.

### 3.7 HARDWARE DELIVERY DATES (on dock KSC delivery)

Thiokol delivered the SRMs required as shown in Figure 4.

## WORK BREAKDOWN STRUCTURE

### 1.1.1 Solid Rocket Motor Buy 1

This WBS element defined the overall effort to provide the management, labor, facilities, tools, materials, hardware, and equipment (excluding government-furnished equipment (GFE)) to:

- a. Design, develop, manufacture, and test the SRMs used to launch the space shuttle flight vehicle and also the associated support equipment (SE) and tooling.
- b. Sustain the tooling and support equipment acquired under basic contract. Acquire and maintain additional tools and support equipment necessary to meet requirements.
- c. Support integration of the SRM into the solid rocket booster (SRB).
- d. Manufactured and delivered 18 flight test motors (9 flight sets, STS-7 through STS-15, January 1983 through April 1984).
- e. Designed, developed, and acquired (manufactured or purchased) a number of items of transportation support equipment (TSE), special test equipment (STE), and ground support equipment (GSE), and delivered items of equipment as directed to both MSFC and Kennedy Space Center (KSC).
- f. Prepared, delivered, and maintained as necessary plans, reports, drawings, specifications, photographs, motion pictures, film clips, microfilms, magnetic tapes, etc., as required by IRD, DPD 400, which was incorporated into the contract. All items of data submitted to NASA as part of the contract are listed in Appendix B.

### 1.1.1.2 Management (HN 101)

#### Organization

Upon receipt of authorize to proceed (ATP) in April 1983, the Wasatch Division of Thiokol Corporation designated the Solid Rocket Motor Project Office (SRMPO) to manage the tasks specified in the contract, with Edward G. Dorsey, Jr., director, and John D. Thirkill, deputy director and chief project engineer. The original Buy 1 organization is shown in Figure 5. The Wasatch Division and Thiokol Corporate organizations were as shown in Figures 6 and 7.

In October 1982, Thiokol Corporation merged with Morton Norwich, forming a new corporation known as Morton Thiokol, Inc., with a corporate structure as shown in Figure 8. The Wasatch Division organization as of 1 Feb 1984 is shown in Figure 9. The makeup of the SRMPO remained stable throughout Buy 1 with very few changes in personnel and assignments; however,



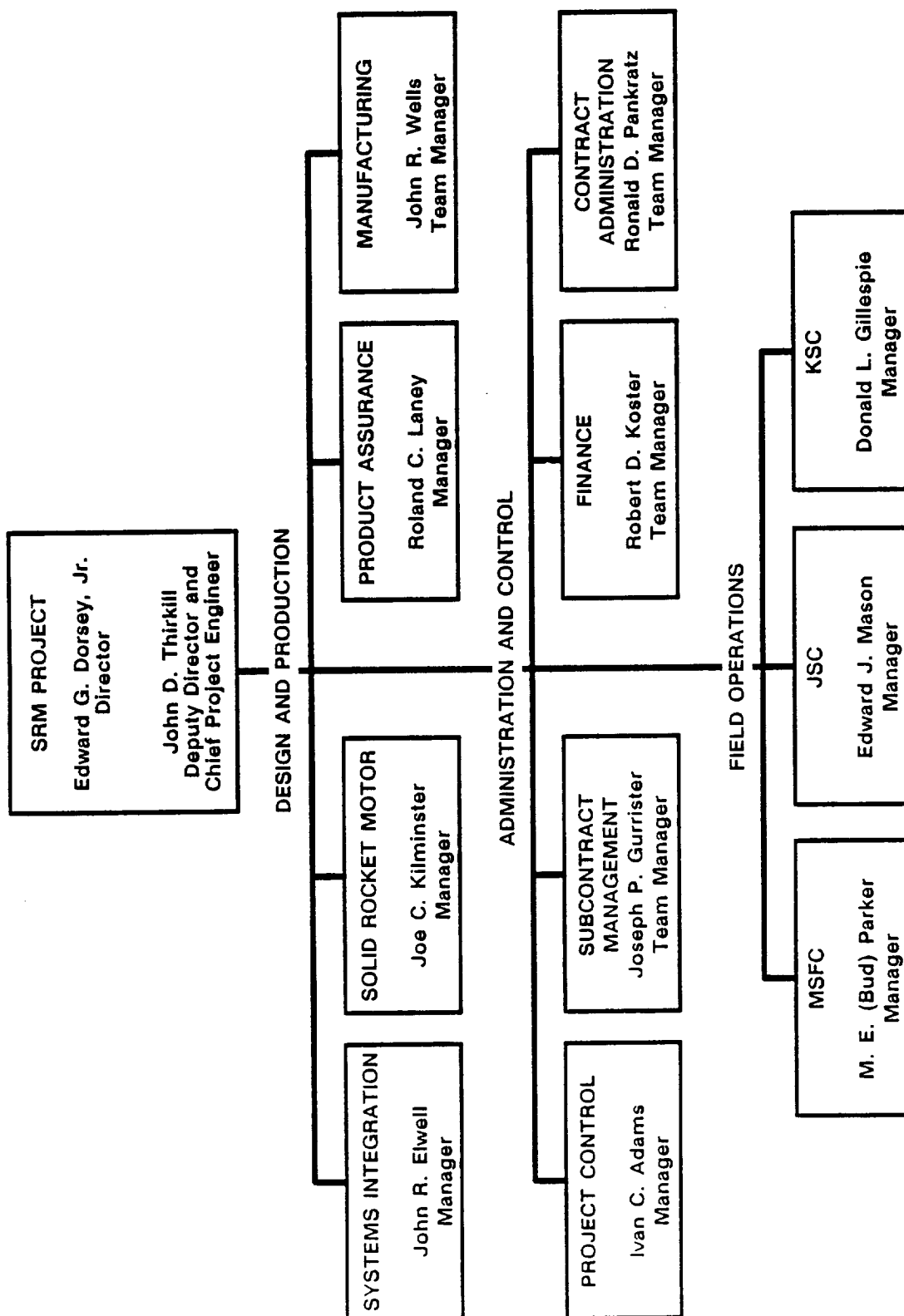


Figure 5. SRM Project Organization, June 1974

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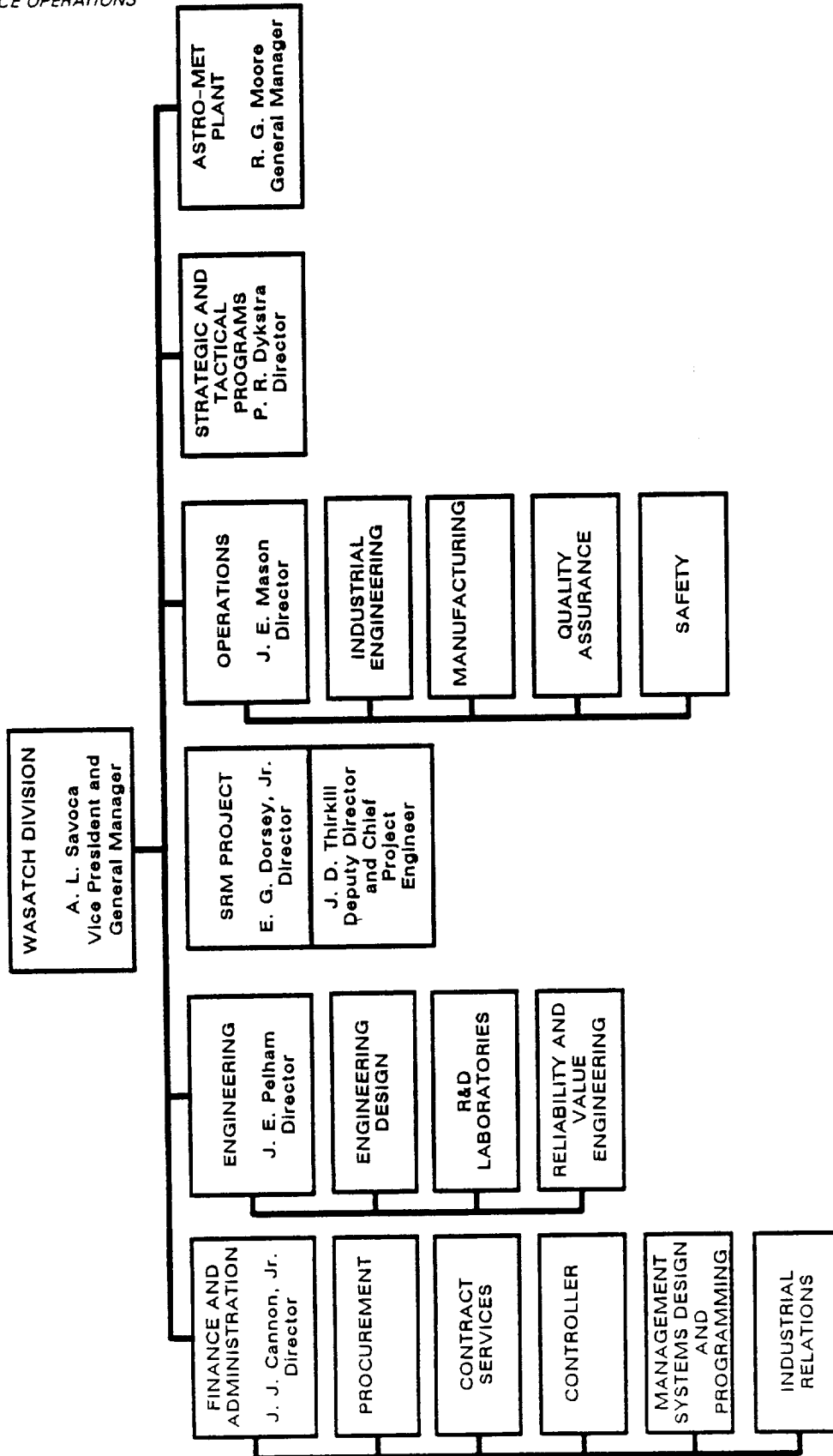


Figure 6. Wasatch Division Organization, June 1974

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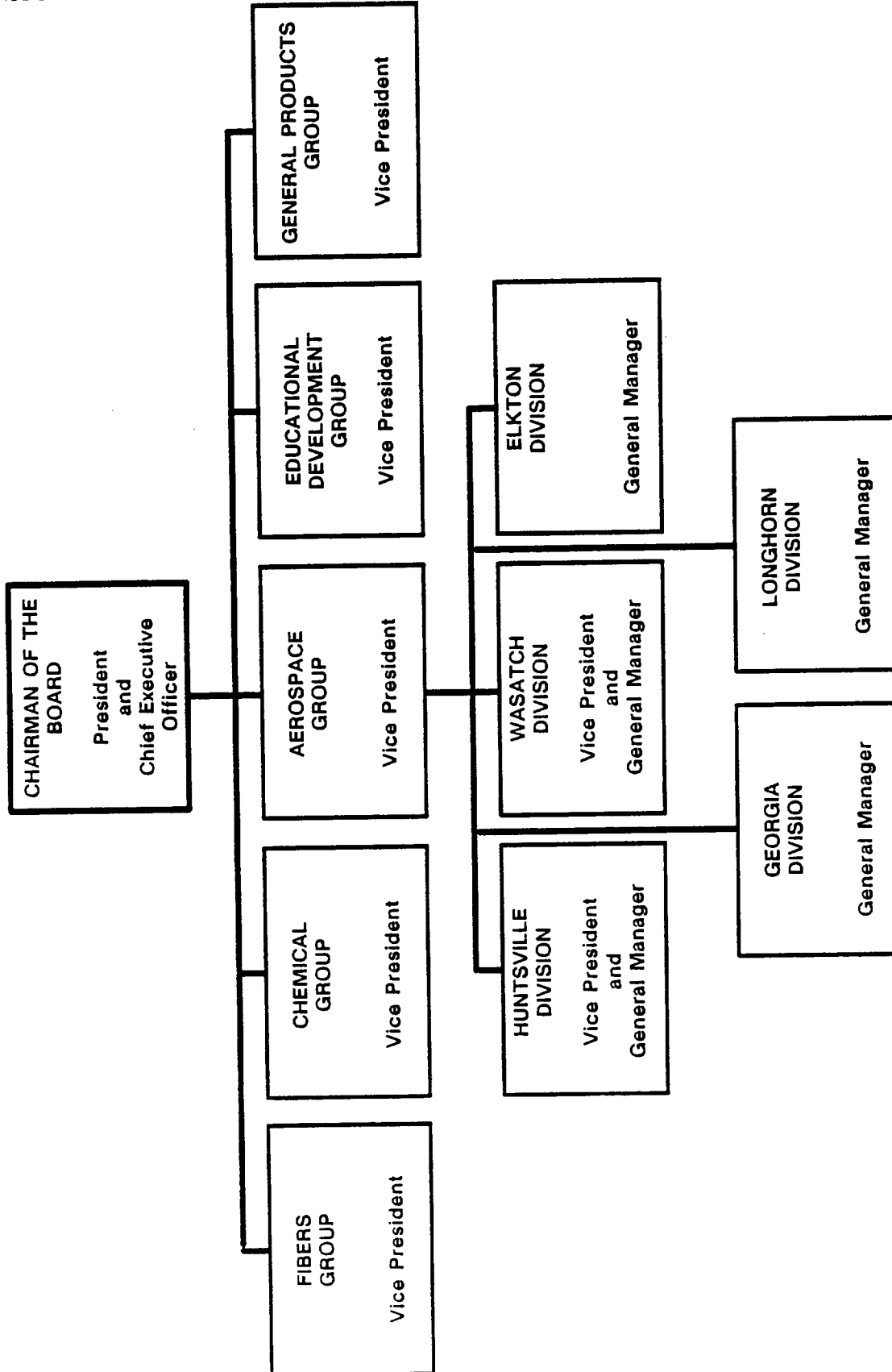


Figure 7. Thiokol Corporate Organization, June 1974

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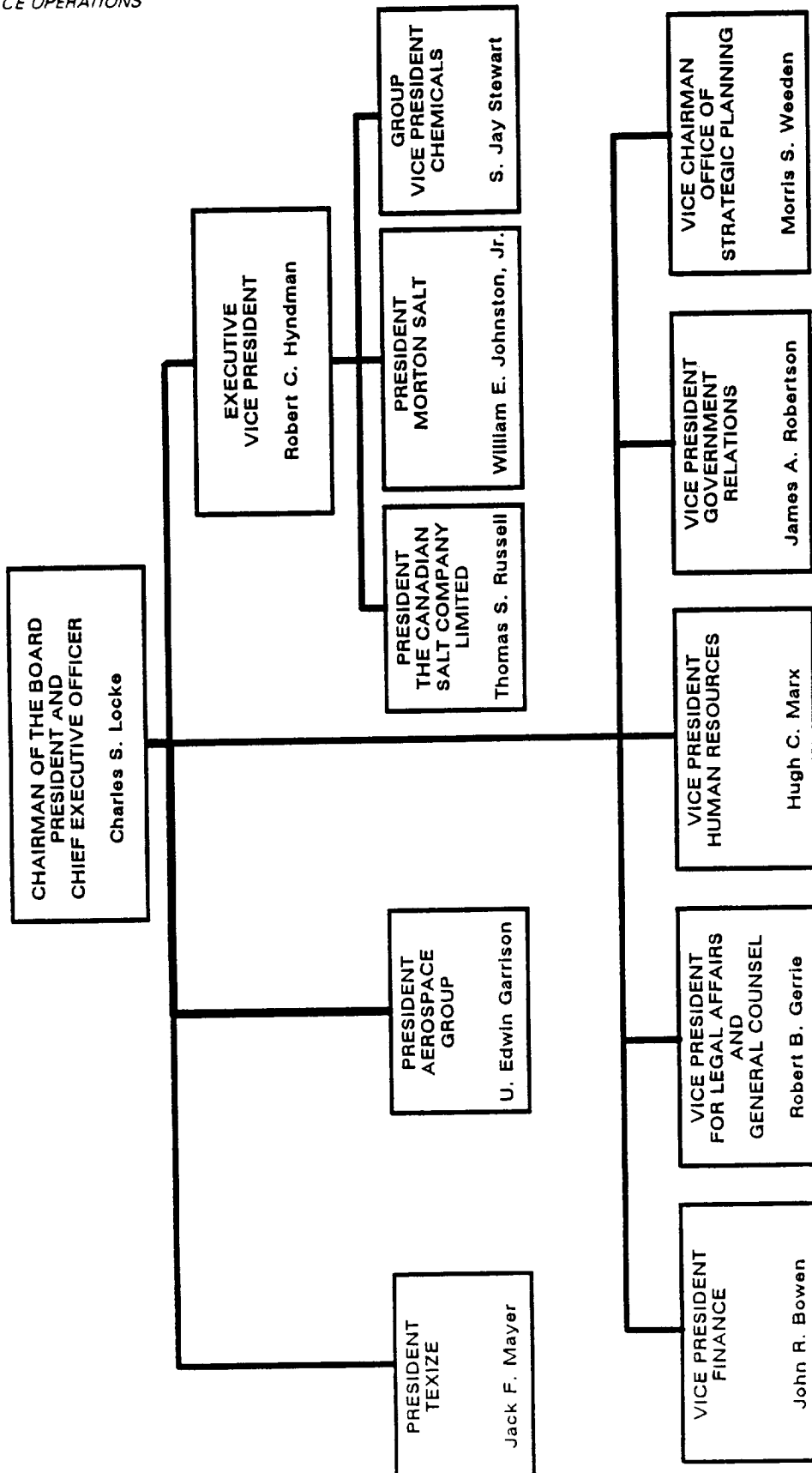


Figure 8. Morton Thiokol, Inc., Corporate Organization, 1 Feb 1984

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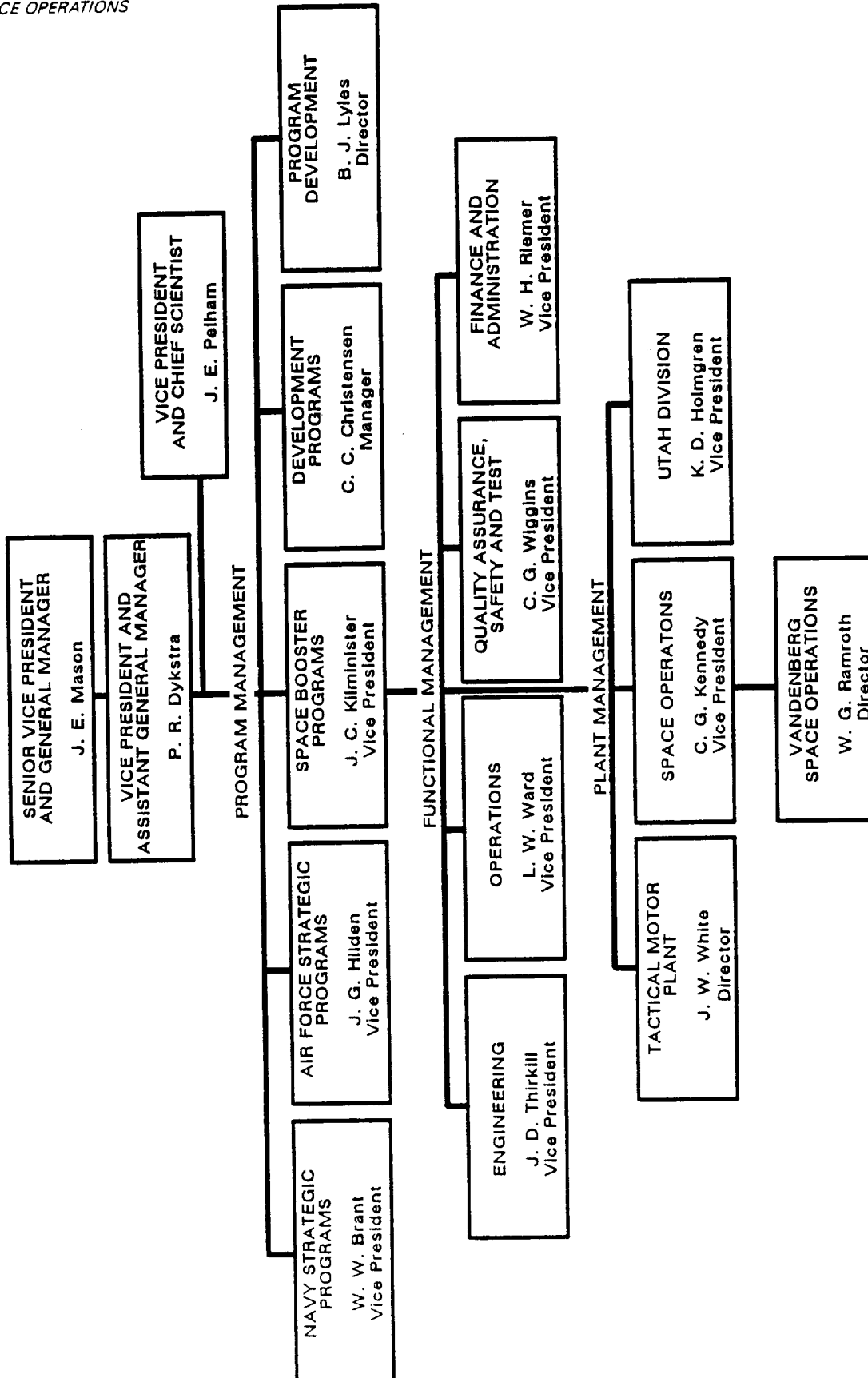


Figure 9. Wasatch Division Organization, 1 Feb 1984

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to accommodate increases in scope and responsibilities, the SRMPO was redesignated as Space Booster Programs, with Edward G. Dorsey, Jr., vice president, and Joe C. Kilminster, SRM project director.

When Dorsey retired in November 1983, Joe C. Kilminster succeeded to the position of vice president, Space Booster Programs, with Boyd C. Brinton as director of the SRM project. The organization at the beginning of February 1984 is shown in Figure 10.

#### Project Management and Direction

Wasatch Division management policies and procedures provided the project director and his organization with complete authority to successfully manage and direct the SRM project. The project director delegated responsibility and authority to specific project managers in the SRMPO to manage and direct specific elements of the WBS. The SRMPO exercised authority to:

- a. Direct and control the assigned project, including development and production effort.
- b. Develop overall plans, project mileposts, master plans, and schedules to achieve NASA project goals and objectives.
- c. Allocate resources to fulfill contract requirements.
- d. Coordinate and control total project effort to utilize resources, maintain schedules, and conform to quality standards, customer specifications, and budget allocations.
- e. Develop solutions to unexpected or critical problems to attain project objectives and comply with NASA requirements.
- f. Represent the corporation to the NASA and associate contractors.

The SRMPO managers acted in the capacity of both program managers and project engineers and were supported by team managers who represented the functional organizations of Manufacturing, Quality Assurance, Finance, Procurement (Subcontract Management), and Contracts. Each team manager:

- a. Had the authority to act as director of his functional organization and was fully supported by that organization.
- b. Brought to the project effort the specialized talents in his field and of his organization, thus ensuring technical excellence at minimum cost.
- c. Was responsible to the cognizant project manager for the performance of the functional organization he represented.

Management of the project and the WBS elements was closely controlled by means of the project director's weekly team meetings attended by WBS managers and team managers, WBS

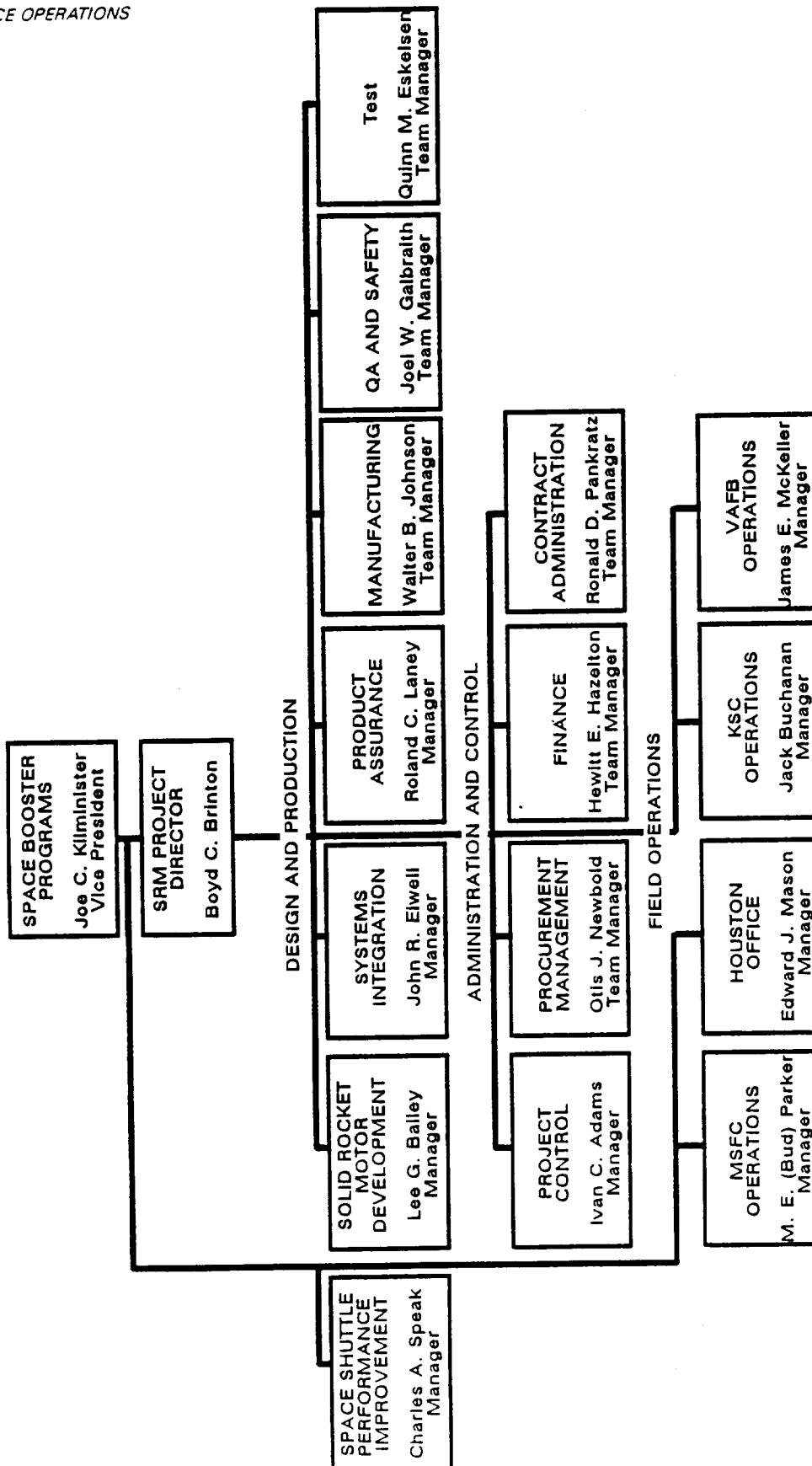


Figure 10. Space Booster Program Organization, 1 Feb 1984

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managers' weekly team meetings, individual coordination as necessary, and directions issued by formal means, such as: subdivided work descriptions (SWD), action orders, and memoranda. To ensure that NASA requirements were fully met at all times, frequent technical interchange meetings were held with NASA representatives. In addition to the scheduled formal design reviews, quarterly reviews were also held, and a number of informal conferences also took place.

The SRM management activity provided management of administrative functions of the SRM project as follows:

- 1.1.1.2.1 Performance Management
- 1.1.1.2.2 Configuration Management
- 1.1.1.2.3 Information Management
- 1.1.1.2.4 GFE/GFP Management
- 1.1.1.2.5 Procurement Management
- 1.1.1.2.6 Project Direction

The complete WBS is contained in, *Expanded Work Breakdown Structure and Dictionary*, TWR-10517. Details of the management of the SRM project are contained in, *Management Plan for Space Shuttle Solid Rocket Motor Project*, TWR-10191.

1.1.1.2.1 Performance Management (HN101)

This effort provided the performance management activities, including: establishment and implementation of the financial plan, management of the control and performance measurement system, preparation and monitoring of budgets, and preparation and submittal of required resource status reports. Activities are further defined as:

- a. Updated and maintained the WBS in conjunction with DR 1-2, DPD 400.
- b. Updated and maintained the SWD which defined detail work elements, area performing activities, and start and completion dates.
- c. Implemented and maintained the Management Cost and Control System (MCCS) in conjunction with division policies and procedures and NASA document MM8020.6, Rev 1 (1 Oct 1982).
- d. Provided cost per flight projections and status on a required basis.
- e. Prepared and submitted the performance measurement cost/schedule/technical reports in accordance with DR 1-11, DPD 400.
- f. Prepared and submitted to the customer the monthly and quarterly financial management reports in accordance with DR 1-5 and DR 1-6, DPD 400.



#### 1.1.1.2.2 Configuration Management

This task included the effort to define, control, and account for all hardware configurations at any point in time throughout the project by managing the following:

- a. Identification of configuration baselines.
- b. Control of changes to configuration baselines.
- c. Verification that the as-built configuration agrees with the current configuration baseline, or that differences are identified.
- d. Establishment and maintenance of specification formats, end item selection criteria, and procedures for control and accounting of configurations and changes.
- e. Prepare for and support preliminary design reviews (PDR), critical design reviews (CDR), design certification reviews (DCR), and configuration management audits.
- f. Preparation of change proposals.

The following is a brief summary of the main events associated with this task:

- a. Prepared and submitted all data necessary to conduct planned PDRs, CDRs, and DCRs.
- b. *Configuration Management Plan*, TWR-10150, was prepared to implement and control the configuration management requirements. The following is a brief summary of the revision history on this document:
  1. Rev A incorporated NASA's comments on the original submittal of the Configuration Management Plan.
  2. Rev B incorporated the contract end item (CEI) specification as the controlling document for NASA Level III baseline requirements.
  3. Rev C changed the CEI addenda format so that each addendum only covers the applicable end item differences from the basic specification.
  4. Rev D incorporated MSFC/KSC-CMP-1 comments by NASA as a result of the configuration management audit conducted 5 to 7 May 1981, configuration management requirements pertaining to time compliance technical instructions (TCTIs), retrofit requirements, hardware qualification status control, the applicable requirements of *SRB Plan for Hardware and Material Returned From Space*, and organizational changes.
  5. Rev E incorporated STS-1 artifact traceability.
- c. All vendors supplying major criticality 1 components were baselined.

- d. A computer system capable of providing an automated as-built versus as-engineered comparison was developed and adopted as an aid in the acceptance of delivered items.
- e. A change board was established to provide effective engineering and process change control both in-house and at vendors and with baseline (approved) processes.
- f. PDRs and CDRs for the baseline design SRM and the HPM were successfully conducted.
- g. An effective system for preparing and submitting engineering change proposals (ECPs) for Class I engineering changes in accordance with NASA/MSFC manual MM8040.12, *Standard Contractor Configuration Management Requirements MSFC Programs*, was established.

All configuration management activities were successfully carried out in compliance with the requirements of MM8040.12. Departures from the requirements of MM8040.12 were implemented only as directed by NASA/MSFC.

#### 1.1.1.2.3 Information Management

The information management and deliverable data activity consisted of the overall management process and effort required to establish and maintain adequate control of all information produced in connection with contract performance. This activity comprised the following elements:

- 1) management of reportable data, 2) project scheduling and control, 3) operation and maintenance of the management information center (MIC), and 4) documentary photography.

These activities were directed and controlled by Information Management, Project Control Department of the SRMPO, Space Booster Programs Directorate.

#### Management of Reportable Data

Management of reportable data was primarily concerned with the acquisition, identification, storage, accountability, and distribution of information. Included in this activity were the following:

- a. Establishing and maintaining the IRD, DPD 400, Rev A, and maintaining a continuing review of information requirements as described therein. The IRD was prepared by the contractor, submitted as part of the proposal, and incorporated into the contract by reference. All changes to the IRD were prepared by the contractor and approved (MSFC letter or contract modification) by NASA prior to implementation.
- b. Scheduling and directing preparation of data items required by the IRD, and accomplishing final review and transmittal of such data. Controlling maintenance of Type-1 data (as identified in the IRD) through use of document change notice (DCN) procedures as specified in the IRD.
- c. Preparing and distributing a monthly Contractor's Information Accessioning List as required by the IRD.

- d. Establishing and maintaining a system for identification and control of vendor and subcontractor data requirements.
- e. Providing editorial, composition, and illustrator services, and accomplishing printing, duplicating, and binding of all items of data as required.
- f. Receiving, controlling, and distributing information transmitted by NASA and associate contractors, and establishing and maintaining a system for identification, storage, and retrieval of such information. Maintaining a record of all information transmitted to NASA, and all transactions between the contractor and NASA and between the contractor and associate contractors.

All items of data required by the IRD were prepared and transmitted to NASA in accordance with distribution instructions provided by MSFC. A cumulative listing of data submitted to NASA is contained in Appendix B.

#### Project Scheduling and Control

This activity included the following elements:

- a. Received, via contract change order, changes to NASA delivery and launch schedules, reviewed and evaluated schedule changes, assessed impact, and disseminated results to management and to NASA. Received, reviewed, and evaluated proposed or "what if"-type schedules and returned results to NASA.
- b. Prepared and maintained program requirements documents. These were master documents defining program milestones. The program requirements documents were then used to prepare detailed project schedules covering all activities of design, procurement, manufacture, test, transportation, and delivery of program hardware and contract-required engineering and technical data.
- c. Maintained a continuing review and analysis of vendor and in-house schedules (master and detail), noting critical paths and pinch points and notifying management and NASA of incipient problem areas. Revised schedules as necessary and submitted them to NASA on a weekly/monthly basis to meet NASA requirements.

Major program events from ATP through STS-15 launch are listed in Table 1.

#### Operation and Maintenance of the Management Information Center

The MIC adjacent to Space Booster Programs Directorate offices served as the focal point for all planning, decision-making, and display for current project, technical, cost, schedule, and other programmatic data. The MIC is organized into three areas: an information area, a projection area, and a support area.

**Table 1. Major Program Events**

**Casting Dates**

STS-7A	12 Jul 1982
Aft	28 Jul 1982
Aft-C	25 Aug 1982
Forward-C	15 Sep 1982
Forward	
STS-7B	13 Jul 1982
Aft	29 Jul 1982
Aft-C	26 Aug 1982
Forward-C	16 Sep 1982
Forward	
STS-8A	20 Dec 1982
Aft	4 Jan 1983
Aft-C	24 Jan 1983
Forward-C	21 Feb 1983
Forward	
STS-8B	21 Dec 1982
Aft	5 Jan 1983
Aft-C	25 Jan 1983
Forward-C	22 Feb 1983
Forward	
QM-4 Static Test	21 Mar 1983
<b>Casting Dates</b>	
STS-9A	28 Mar 1983
Aft	4 Apr 1983
Aft-C	20 Apr 1983
Forward-C	25 Apr 1983
Forward	
STS-9B	29 Mar 1983
Aft	5 Apr 1983
Aft-C	21 Apr 1983
Forward-C	26 Apr 1983
Forward	
STS-6 Launch	4 Apr 1983
Flight Crew: Weitz, Bobko, Peterson, Musgrave	
<b>Casting Dates</b>	
STS-10A	16 May 1983
Aft	6 Jun 1983
Aft-C	22 Jun 1983
Forward-C	24 May 1983
Forward	
STS-10B	17 May 1983
Aft	7 Jun 1983
Aft-C	23 Jun 1983
Forward-C	25 May 1983
Forward	

**Table 1. Major Program Events (Cont)**

	<u>From Corinne</u>	<u>Arrive KSC</u>
Inert Segment to KSC		
Forward	14 Jun 1983	26 Jun 1983
Aft	15 Jun 1983	26 Jun 1983
STS-7 Launch		18 Jun 1983
Flight Crew: Crippen, Hauck, Fabian, Thagard, Ride		
Casting Dates		
STS-11A		29 Jun 1983
Aft		5 Jul 1983
Aft-C		26 Jul 1983
Forward-C		13 Jul 1983
Forward		
STS-11B		30 Jun 1983
Aft		6 Jul 1983
Aft-C		27 Jul 1983
Forward-C		14 Jul 1983
Forward		
STS-12A		15 Aug 1983
Aft		10 Aug 1983
Aft-C		23 Aug 1983
Forward-C		31 Aug 1983
Forward		
STS-12B		15 Aug 1983
Aft		11 Aug 1983
Aft-C		23 Aug 1983
Forward-C		1 Sep 1983
Forward		
STS-8 Launch		30 Aug 1983
Flight Crew: Truly, Brandenstein, Gardner, Clugord, Thornton		
Casting Dates		
STS-13A		13 Sep 1983
Aft		6 Sep 1983
Aft-C		19 Sep 1983
Forward-C		4 Oct 1983
Forward		
STS-13B		14 Sep 1983
Aft		7 Sep 1983
Aft-C		20 Sep 1983
Forward-C		5 Oct 1983
Forward		
STS-14A		21 Nov 1983
Aft		11 Oct 1983
Aft-C		24 Oct 1983
Forward-C		31 Oct 1983
Forward		
STS-14B		22 Nov 1983
Aft		12 Oct 1983
Aft-C		25 Oct 1983
Forward-C		1 Nov 1983
Forward		

**Table 1. Major Program Events (Cont)**

**Casting Dates**

STS-15A	5 Jan 1984
Aft	14 Nov 1983
Aft-C	15 Dec 1983
Forward-C	7 Dec 1983
Forward	
STS-15B	6 Jan 1984
Aft	15 Nov 1983
Aft-C	16 Dec 1983
Forward-C	8 Dec 1983
Forward	
STS-9 Launch	28 Nov 1983
Flight Crew: Young, Shaw, Gerriot, Parker (Lichtenberg, Merbold)	
STS-11 Launch	3 Feb 1984
Flight Crew: Brand, Gibson, McCandless, McNair, Steward	
NASA Headquarters Approved Third Set of Railcars	15 Feb 1984
Incident at Casting Pits	2 Mar 1984
STS-13 Launch	6 Apr 1984
Flight Crew: Hart, Van Hoften, Nelson, Crippen, Scobee	
First Case After 2 Mar 84 Incident (STS-17B Forward)	24 May 1983

**SPACE SHUTTLE LAUNCHES OVERVIEW**

**DDT&E Launch Dates**

**Motor Assignments**

**Launch Dates**

STS-1	12 Apr 1981
STS-2	12 Nov 1981
STS-3	22 Mar 1982
STS-4	27 Jun 1982
STS-5	11 Nov 1982
STS-6	4 Apr 1983

**Buy 1 Launch Dates**

STS-7	18 Jun 1983
STS-8	30 Aug 1983
STS-9	28 Nov 1983
STS-11	3 Feb 1984
STS-13	6 Apr 1984
STS-14	30 Aug 1984
STS-17	5 Oct 1984
STS-19	8 Nov 1984
STS-20	24 Jan 1984

The information area is essentially a conference room equipped with multimedia audio and visual aid capability. For the SRM Buy 1 project, these included permanent wall displays, backlighted panel displays, and a large screen equipped for rear-screen projection, as well as overhead microphone and speaker systems for teleconferences and tape recording systems. The conference room is also equipped with a terminal for the NASA 4-wire teleconference network and a separate teleconference system that operates through the regular telephone circuits.

The projection area is equipped with dual overhead projectors, dual 35-mm slide projectors, and a 16-mm sound film projector. An audio and cuing link provides communication with the conference room.

The support area provides the necessary facilities for revising and photographing panel displays which can be moved along tracks from the conference room to the support area. Also included are facilities for preparation, revision, and storage of visual aids. For the SRM project, currently maintained backlighted panel displays were photographed in the support area to provide masters for status reports and other printed publications. Operation and maintenance of the MIC consisted of the following:

- a. Communications and Recording consisted of: 1) recording and preparing minutes for weekly team meetings and other meetings as required; 2) receiving and distributing agendas and minutes of NASA teleconferences (SIRs, PRCBs, etc. as required), notifying interested personnel and assisting NASA communications centers in completing conference hookups; and 3) helping to establish teleconference hookups as required for conferences originating at the Wasatch Division.
- b. Audiovisual Support involved the operation of various types of projection equipment located in the MIC projection area in support of meetings and presentations.
- c. Charts and Displays consisted of the preparation, maintenance, and photo reduction of charts and displays required for the operation of the MIC and the preparation of printed status reports.

#### Documentary Photography

The recording of significant events, operations, and processes was an important activity in the management of SRM project information. Documentary photography was accomplished in accordance with the documentary photography plan, *Documentary Photograph Requirements for the Space Shuttle Project*, TWR-10667, DR 1-13. A schedule of events, operations, and processes was reviewed with the MSFC resident manager who selected photographic records which were of interest to NASA. Still color 8 by 10-in. prints, together with negatives and 16-mm silent color

motion picture camera film, were provided to MSFC. A listing of events photographed and filmed during Buy 1, together with negative and film identification numbers, is presented in Appendix B.

#### 1.1.1.2.4 GFE/GFP Management

This element provided the effort required to establish and maintain GFE by:

- a. Identifying, analyzing, and scheduling SRM project-related requirements for GFE.
- b. Providing records and reports on the status of all GFE.

Over the period of the Buy 1 contract, the reporting of GFE requirements and status, equipment needs, schedule need dates, quantities and actual delivery dates were covered quarterly in report TWR-10195. This document was updated at the conclusion of the Buy 1 phase of the contract to reflect the GFE requirements of the SRM Increment I requirements.

#### 1.1.1.2.5 Procurement Management

Morton Thiokol *Procurement Management Plan*, TWR-10194, Rev A, outlined the requirements for subcontract management intended for use in support of NASA SRM Buy 1 and production programs. It summarized, or incorporated by reference, corporate Wasatch Division management and functional organization procedures and policies controlling and implementing the total acquisition process. Administration of procurement management was under the direction of the manager of Procurement. The focal point for SRM procurement activities was the SRM procurement team manager, who used the detailed knowledge and experience of individual buyers to place and administer subcontracts. The SRM procurement team manager interfaced with the SRM Project Office and representatives of functional organizations to establish contractor controls. An overview of the subcontract procurement items is noted in Table 2.

#### 1.1.1.2.6 Project Direction

This activity provided the overall top level project management and key team member functions not specifically included in any other WBS element, and exercised responsibility to:

- a. Ensure that negotiated project costs were not exceeded.
- b. Ensure that project schedules were maintained.
- c. Establish effective production techniques to effect the lowest possible cost per flight.
- d. Provide top level management support for procurement and subcontract management.
- e. Provide liaison support to NASA facilities (MSFC, KSC, and Johnson Space Center (JSC)).

#### Engineering Systems Requirements (HN102)

This task includes the effort required to support integration of the SRM into the SRB including



Table 2. Subcontracting Procurement Overview

All subcontracts awarded in support of SRM Buy 1 effort (Project Designator HN) are complete, and final payment has been made.

Plant expansions for the production of ammonium perchlorate by Pacific Engineering and Production Company and Kerr-McGee were successfully accomplished.

Accomplishment toward the Small Business (SB)/Small Disadvantaged Business Concern (SDBC) Subcontracting Plan were measured as:

	<u>Planned</u>	<u>Actual</u>
Total Subcontract Dollars	\$181,108,980	\$180,230,885
SB Subcontract Dollars	\$35,939,203	\$59,663,448
SDBC Subcontract Dollars	\$452,960	\$1,005,842

During performance under NAS8-30490, Schedule B, Thiokol continued to maintain a Procurement System approved by the Government under the administrative cognizance of Air Force Contract Management Division (AFCMD).

support to SRB Buy 1, along with analyses, studies, and evaluations necessary to define requirements. This effort included:

- a. Conducting system engineering analyses.
- b. Conducting trade studies to evaluate design approaches, cost effectiveness, and schedule constraints.
- c. Participation in development and control of interface control documents (ICD) and ICD controlled hardware interfaces.
- d. Supporting design, reviews, audits, and analyses.
- e. Processing technical directives (TD) applicable to Exhibit C to the contract.
- f. Evaluating and determining the impact of all Level II and Level III requirements changes affecting the SRM.

#### 1.1.1.3.2 Reliability and Liaison Engineering

The safety, reliability, and quality assurance (SR&QA) activities were conducted to ensure total mission success of the manned space shuttle system. These activities involved the planning, implementation, and documentation necessary to fulfill the requirements of NASA document NHB 5300.4 (1D-2), *Safety, Reliability, Maintainability and Quality Provisions for the Space Shuttle Program*.

The SR&QA activities implemented and accomplished during the period of performance included the following:

- a. Established design requirements/criteria.
- b. Participated in design reviews.
- c. Conducted supplier selection, monitoring, control, and audits.
- d. Conducted design trade studies.
- e. Prepared failure mode effects analysis/critical items list (FMEA/CIL) reports, and conducted hazards analyses.
- f. Monitored and evaluated test programs.
- g. Reviewed and approved engineering documentation.
- h. Participated in failure investigations.
- i. Accomplished problem reporting.
- j. Performed nonconformance investigations and corrective actions.

- k. Conducted performance analyses and assessments.
- l. Reported accidents/incidents.
- m. Prepared certificates of qualification (COQ).
- n. Conducted motivation awareness.
- o. Prepared environmental impact statements.
- p. Supported annual SR&QA and materials and processes (M&P) audits by MSFC.

#### Safety

The main safety tasks involved the identification of safety criteria for SRM and manufacturing equipment designs. Operations hazards analyses were also conducted on the SRM and selected GSE items. All accidents/incidents of a significant nature were reported to MSFC and corrective action reports were submitted. Environmental impact assessments and statements were prepared to cover manufacturing and test operations at Wasatch Division. Special hazards studies and analyses of KSC SRM operations were conducted to identify potential hazards and actions required to prevent accidents or incidents involving the handling and storage of SRMs. Motivation awareness activities were accomplished in-plant and at suppliers, including launch honoree attendance at several space shuttle launches.

#### Reliability

SRM designs were prepared in compliance with design requirements criteria identified by Reliability. Assurance that these criteria were incorporated was accomplished by approving all engineering documentation (drawings, specifications, test plans, test reports, etc.) and participating in all design reviews (PDRs, CDRs, etc.). FMEA/CIL documents were prepared for all SRM designs. Assurance that critical hardware was adequately inspected was accomplished by identifying critical hardware characteristics and providing this data to Quality via the engineering data requirements (EDR) form. Trade studies, evaluations, and analyses were conducted to confirm that SRM design features were adequate and redundancy was incorporated where possible. Significant problems were reported, and participation in failure investigations was accomplished. COQs were prepared for all flight motors and backup data identified and provided to MSFC.

#### Quality Assurance

Quality engineering and inspection functions were performed to ensure that quality hardware was delivered to NASA. This activity started with the identification of quality requirements/criteria for the SRM design. Review/approval of all engineering documentation assured that the criteria were complied with, and that the design characteristics could be confirmed by inspection. Detailed inspection planning and trained line inspectors ensured that quality hardware was produced.

Nonconformance investigations and corrective action activities further ensured that acceptable hardware was being manufactured. Suppliers were selected, controlled, and monitored against detailed engineering documentation. Annual audits were conducted to ensure that high quality was maintained in the suppliers' quality system and hardware. Production quality requirements were evaluated and changes incorporated in the quality production plan to ensure continued quality hardware.

#### 1.1.1.4 Multi-element Support (HN103)

This element provided the effort and support for work disciplines not ordinarily charged to other WBS elements and included the following:

- a. Launch Site Liaison
- b. Facilities
- c. Structural and Dynamics Test Support
- d. Logistics
- e. Transportation
- f. SRM and Recovered Hardware

##### 1.1.1.4.1 Launch Site Liaison

This element included development of launch site planning, launch site labor, task analysis, operations analysis, and transportation analysis for the launch site at KSC.

##### 1.1.1.4.2 Logistics

This element included the development planning, analysis, and integration of all activities related to SRM launch site operations. A launch site support systems requirements analysis was prepared to encompass all functions involving shipment of the SRMs from Wasatch Division to KSC, with all operations at KSC to include transportation, handling, receiving, inspection, assembly, checkout, integration, recovery, disassembly and refurbishment, test operations, and shipment of hardware back to the Wasatch Division.

The results of this activity included the following types of information:

- a. SE items required including GSE, CSE, and TSE.
- b. Facility and flight hardware interfaces for SE identified to be included in SE design and ICD development.
- c. Operations and maintenance documents (OMD) needed for complete and proper coverage of the SRM-related operations.
- d. Definition of the support materials and supplies required to perform specific tasks.

- e. Identification of any special operations and maintenance requirements to be included in the OMRSD.
- f. Identification of areas where SRM-related training should take place and support the development of the training program.

1.1.1.4.3 Facilities

This element included planning and direction to support facility modification and rearrangement. The major effort for construction and modification of facilities was accomplished under facilities contract.

## CONCLUSIONS AND RECOMMENDATIONS OF PROGRAM

During the period of performance, April 1983 through completion of the program, all objectives were achieved:

- a. Manufacture and delivery of 9 flight motors to KSC were completed on schedule and all test flights were successful. All spent SRMs were recovered.
- b. Design, development, manufacture, and delivery of required transportation, handling, and checkout equipment to MSFC and to KSC were completed on schedule.
- c. All items of data required by DPD 400 were prepared and delivered as directed.

In the system requirements and analysis area, the point of departure from Buy 1 to the operational phase has been developed in significant detail with a complete set of transition documentation available. The documentation prepared during the Buy 1 program has been maintained and updated where required. The following documentation will be maintained:

- ICDs
- MEA reports
- ORLA reports
- OMRSDs
- CEI specifications

The following flight support activities should be continued through other production programs:

- a. As-built materials usage tracking on all flight hardware.
- b. Mass properties reporting for all flight hardware until sample size is large enough to verify that the weight limit requirements have been met.
- c. Ballistic predictions and postflight performance assessments for all production flights.
- d. Recovered SRM hardware inspection and anomaly identification.

In the SR&QA area, activities accomplished were assurance oriented in nature and specifically formulated to prevent problems and hardware failures. The flight program to date has adequately demonstrated the success of this assurance approach. The attention focused on details of design, analysis, manufacture, and inspection to assure the production of high-quality hardware has resulted in the absence of flight failures. The few anomalies which did occur have been evaluated, design or manufacturing changes incorporated, and corrective actions taken to preclude recurrence.

## FLIGHT 7 AS-BUILT CONFIGURATION

The Flight 7 and Flight 15 reports consist of data extracted from the as-built configuration files in the Information Management System (IMS) for each flight set. Listed on the reports are the part number, description, and the engineering change order (ECO)/specification change notice (SCN) for each part. The reports were generated by Data Management.

NOTE: FLIGHT SET 8 THROUGH 14 DATA ARE AVAILABLE FROM IMS ON REQUEST THROUGH MSFC PROJECT OFFICE. FLIGHTS 7 AND 15 WERE SELECTED AS THE FIRST AND LAST FLIGHTS IN THE CONTRACT AND ARE TYPICAL OF THE OTHER FLIGHTS.

## Flight 7 As-Built Configuration

AS-BUILT PART LIST SIS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
SIS-7A	MOTOR #7A	
SIS-7B	MOTOR #7B	
STW3-2654	SS S/A ACPT/TEST	0004
STW3-2717	MOLD INSERT, IGN NOZ	0003
		0002
STW3-3168	NOZZLE PLUG, FOAM	
STW4-2527	TEE-RING WEB EXTRUSI	0004
		0003
		0002
		0001
STW4-2528	T-RING CAP EXTRUSION	0004
		0003
		0002
		0001
STW4-2529	THERMAL INSULATION	0004
		0002
		0001
STW4-2530	TEE SEGMENT	0004
		0002
		0001
STW4-2531	EXTRSN INHBTR FLR	0004
		0003
		0002
		0001



## AS-BUILT PART LIST STS-7 11/17/89

## SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
STW4-2532	EXTRUSION, NBR	0001
STW4-2533	EXTRUSION, NBR	0001
STW4-2535	DOVE FLLR EXTRUSION	0001
STW4-2536	THERMAL INSULATION	0004
		0003
		0002
		0001
STW4-2563	INSULATION	
STW4-2563,2.00	INSULATION	
STW4-2600	TERPOLYMER	0002
		0001
STW4-2601	EPOXY RESIN	0002
		0001
STW4-2602	AMMONIUM PERCHLORATE	0007
		0006
		0005
		0003
		0002
STW4-2603	ALUMINUM POWDER	0006
STW4-2604	FERRIC OXIDE	0003
		0002
		0001
STW4-2604(7779)	IRON OXIDE	0002
		0001

## AS-BUILT PART LIST STS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
STW4-2621	INSUL, .200 THK	0019
		0016
		0015
		0012
		0011
		0009
		0008
		0007
STW4-2636	FLOATS PULP	0001
STW4-2644	LIQUID POLYMER	0001
STW4-2645	IRON HEXOATE	0001
STW4-2646	EPOXY RESIN	0001
STW4-2647	PHSPHNE OXIDE (MAPO)	
STW4-2648	THIXOTROPIC POWDER	0001
STW4-2679	SILICON DIOXIDE	
STW4-2680	CURING AGENT	
STW4-2700	CORK, SHEET	0007
STW4-2736	EPDM, SILICA FILLED	0009
		0008
		0007
		0006
		0005

AS-BUILT PART LIST STS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
-----	-----	-----
		0004
		0003
		0002
		0001
STW4-2806	LUBRICANT	0001
STW4-2832	ALUMIUM POWDER	0001
STW4-2847	PUTTY, VACCUM SEAL	0002
		0001
STW4-2847, TY. 1	PUTTY, VACCUM SEAL	0003
		0002
		0001
STW4-2868	INSULATION	0006
		0005
STW4-2871	FABRIC, CARBON	
STW4-2874	ELECT. CONDUCTV CMPD	0002
		0001
STW4-2886	BINDER, PLASTIC, RESIN	
STW4-2887	BORON POWDER	
STW4-2919	THREAD, NYLON	0001
STW4-2928	DYE, PHENOL RED	0001
STW4-2955	LUBRICANT	0001
STW4-2987	CORK	
STW4-2996	CURING AGENT GENAMID	

## AS-BUILT PART LIST STS-7 11/17/89

## SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
STW4-3172	TAPE, TEFLON	
STW5-2649	LINER, CRBN CLOTH	0015
		0014
		0013
		0010
		0009
STW5-2650	INSUL CMPD THERMAL	0007
		0006
		0005
		0004
STW5-2651	CONE STRCTR, GLSS CL	0010
		0009
		0008
		0007
		0006
STW5-2652	SILICA CLOTH PHEN	0008
		0007
		0006
		0005
		0002
		0001
STW5-2656	ADHESIVE PRIMER	0004
		0003

## AS-BUILT PART LIST STS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
STW5-2657	ADHESIVE	0002
		0001
		0005
		0004
		0003
		0002
		0001
STW5-2664	PRIMER	0003
		0002
		0001
STW5-2665	ADHESIVE	0001
STW5-2667	MDLNG COMP CHOP SILI	0003
		0002
STW5-2671	COATING, PRIMER, RUS	0002
		0001
STW5-2672	COATING	0006
		0005
		0004
		0003
		0002
		0001
STW5-2672(7235)	COATING	0006
		0005
		0004

AS-BUILT PART LIST STS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
-----	-----	-----
		0003
		0002
		0001
SIW5-2676	LINER	0007
		0006
		0005
SIW5-2678	SEALANT	
SIW5-2683	PROPELLANT	0013
		0012
		0011
SIW5-2702	IGNITION GRANULES	0002
		0001
SIW5-2712	ADHESIVE	0003
		0002
		0001
SIW5-2723	RUBBER COMPOUND	0001
SIW5-2725	PRIMER	0004
		0003
SIW5-2738	RUBBER SILICONE	0011
		0010
		0009
		0008
SIW5-2776	COATING	
SIW5-2782	COMP, NAT RBBR UNCRD	

## AS-BUILT PART LIST SIS-7 11/17/89

## SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
STW5-2783	CEMENT, NAT RBR-BASE	0002
STW5-2788	MRKNG ENAMEL, BLK	
STW5-2798	ADHESIVE	0001
STW5-2810	ADHESIVE	0004
		0003
STW5-2810(901)	ADHESIVE	
STW5-2811	ADHESIVE	0007
		0006
		0005
		0004
		0003
		0002
		0001
STW5-2813	SEALANT	0005
		0004
		0003
		0002
		0001
STW5-2830	ADHES PATTRNG CLOTH	0002
		0001
STW5-2833	PROPELLANT	0003
		0002
STW5-2835	POTTING COMP	0003
		0002

AS-BUILT PART LIST SIS-7 11/17/89

## SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
STW5-2842	ADHESIVE	0001
STW5-2845	ACC CRIT NOZZ COMP	0008
		0007
		0006
		0005
STW5-2849	BONDING AGENT	0003
		0002
STW5-2878	EPOXY ADHESIVE(2216)	0003
		0002
		0001
STW5-2879	EPOXY PASTE	0003
		0002
		0001
STW5-2885	BORON PELLETS	
STW5-2898	ADHESIVE	0003
		0002
STW5-2914	PRIMER REQMT SPEC	0005
		0003
		0002
		0001
STW5-2922	BOSTIK COATING	0008
		0007
		0004
		0003



AS-BUILT PART LIST STS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
-----	-----	-----
		0002
		0001
STW5-2931	ADHESIVE	0001
STW5-2936	BONDING AGENT	
STW5-2940	TAPE, TEFLON	0001
STW5-2942	O-RING LUBRICANT	0007
		0004
		0003
		0002
		0001
		0004
STW5-2943	ELASTOMER	0004
STW5-2953	INHIBITOR	0005
		0004
		0003
		0002
		0001
STW5-2975	POTTING COMPOUND	0001
STW5-2976	ADHESIVE, FLEXIBLE	0002
		0001
STW5-2984	TORQUE SEAL	
STW5-2994	COATING	0001
STW5-2995	PRIMER	
STW5-2997	SEALANT HI STRENGTH	
STW5-2998	SEALANT	

AS-BUILT PART LIST STS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
SIW5-3122	TP-H1148Q PROPELLANT	
SIW5-3154	SILICONE RUBBER, RTV	
SIW5-3156	FOAM, URETHANE	
SIW5-3166	PRIMER	
SIW7-2559	REFURBISHED BOLTS	0002
SIW7-2560	REFRSHD STIFFNR RINGS	0004
		0003
		0002
		0001
SIW7-2605	SIDZN OF PROPELLANT	0011
		0010
SIW7-2675	INSP, IGN INIT CHMBR	0005
		0004
SIW7-2684	MASS PROPERTIES REQ.	0016
		0015
		0014
		0009
		0007
		0004
		0001
SIW7-2686	ACCPY REFUR IGN CMP	0004
		0003
		0002

AS-BUILT PART LIST STS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
-----	-----	----
STW7-2692	LEAK TEST	0010 0009 0007 0006 0005 0004
STW7-2698	INSP. NONDESTRUCT, IGN	0010 0009 0008 0007 0006
STW7-2713	LOADED SEG INSP	0002 0001 0016 0015 0014 0013 0012 0011 0009 0008 0007 0006
STW7-2731	INLET FITTING	
STW7-2740	ACCEPT NOZ FLX BRG	

## AS-BUILT PART LIST STS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
-----	-----	----
SIW7-2744	ACPT CRIT REFUB CASE	0014
		0013
SIW7-2747	LEAK TEST CASE SEAL	0005
		0004
		0003
		0002
SIW7-2778	SRM NONFLT HDWR IDEN	0001
SIW7-2786	ACCEPTANCE CRITERIA	0005
		0001
SIW7-2787	LEAK TEST, IGNITER	0005
SIW7-2789	IGNITION SYSTEM GSKT	0006
SIW7-2790	IGNITION SYS GASKET	0004
		0003
SIW7-2791	PROCESS SPEC	0001
SIW7-2796	PREP ACCEP PTIG CMPD	0001
SIW7-2831	INSP INSLTN CMPTS	
SIW7-2843	STD IGN SYS PROPLNT	0006
		0005
		0004
		0003
		0002
		0001
SIW7-2844	S/A ELECT CHECKOUT	0006

## AS-BUILT PART LIST STS-7 11/17/89

## SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
STW7-2853	LEAK TEST	0002
STW7-2859, TY.1	TENSILE ADH BUTTON	0004
		0003
STW7-2859, TY.2	CURE CUP HARDNESS	0004
		0003
STW7-2860	ACCEPT TEST, BONDING	0003
STW7-2860, TY.2	ACCEPT/TEST BONDING	0003
STW7-2863	ACCP. TEST NOZ CMP	0015
		0014
		0013
		0012
		0011
		0010
		0009
STW7-2865, TY.1	THERMAL INSUL COMPD	0003
		0002
		0001
STW7-2865, TY.2	THERMAL INSUL COMPD	0003
		0002
		0001
STW7-2865, TY.3	ACCP. TEST INSUL	0003
		0002

AS-BUILT PART LIST STS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
SIW7-2867	ACCEPT/TEST RUBBER	0003 0002 0001
SIW7-2869	ACCP/REFURB BOLT	0004 0003 0002 0001
SIW7-2883	ACCEPTANCE TEST	0002 0001
SIW7-2883, TY.1	ACCEPT TEST	0002 0001
SIW7-2883, TY.2	ACCEPT TEST	0002 0001
SIW7-2913	LEAK TEST PROC.	0005
SIW7-2937	ARMING MONITOR ASSY	0003 0002
SIW7-2941	ACCEPT TEST, ADHESIVE	0002 0001
SIW7-2954	ACCEPT/TEST EPDM	0005 0004 0003 0002

AS-BUILT PART LIST SIS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN ----
STW7-2990	PREPARATION ACPT	0009
STW7-2991	ACCEPT TEST, BOND	0008
		0007
		0006
STW7-3123	SRM PROP (TP-H1148Q)	0001
STW7-3169	PYRTCHNIC ITEMS	0011
STW7-500	MARKING METHOD	0010
		0007
		0006
		0005
		0004
10100269-01	PLUG,MACHINE THREAD	0001
1050046-01	INSULATION	0002
		0001
1050082-05	R01 EXIT CONE HOUSING	0015
1050082-05	R04 EXIT CONE HOUSING	0015
1050082-05(903)	EXIT CONE HOUSING	
1050083-02	RING,AFT END	0018
		0012
		0011

AS-BUILT PART LIST STS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN ----
1U50083-02(901)	RING,AFT END	
1U50084-03	HSNG NOSE INLET NOZZ	0015
		0014
1U50084-05	NOSE/INLET, NOZZLE	0021
		0015
		0014
1U50084-06	R01 HSNG NOSE, INLET NOZ	0017
		0016
		0015
		0014
1U50084-06	R02 HSNG NOSE, INLET NOZ	0023
		0022
		0021
1U50084-06(901)	NOSE/INLET HSG	
1U50085-02	RING, FWD END	0019
		0018
		0017
		0016
		0015
		0014
		0011
		0010
		0009



AS-BUILT PART LIST STS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
-----	-----	----
1U50085-02(901)	RING, FWD END	0007
1U50086-03	HOUSING, COWL, NOZ.	0011
1U50086-05	R02 HOUSING, COWL, NOZ.	0015
		0013
		0012
		0011
1U50086-05	R03 HOUSING, COWL, NOZ.	0015
		0013
		0012
		0011
1U50086-05(901)	R01 HOUSING, COWL NOZZLE	
1U50087-05	R01 HSNG THR SUPP NOZZLE	0017
		0016
1U50087-05(903)	HSNG THR SUPP NOZZLE	
1U50088-05	HOUSING, NOZZLE-FIXED	0020
		0019
1U50088-05	R01 HOUSING, NOZZLE-FIXED	0020
		0019
1U50088-05(903)	HOUSING, NOZZLE - FIX	
1U50097-01	SHIM	0016
		0014
		0009

## AS-BUILT PART LIST STS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1050097-01(901)	SHIM	
1050097-02	SHIM	0016
		0014
		0009
1050097-02(901)	SHIM	0016
1050097-03	SHIM	0014
		0009
1050097-03(901)	SHIM	0016
1050097-04	SHIM	0014
		0009
1050097-04(901)	SHIM	0016
1050097-05	SHIM	0014
		0009
1050097-05(901)	SHIM	0016
1050097-06	SHIM	0014
		0009
1050097-06(901)	SHIM	0016
1050097-07	SHIM	0014
		0009

## AS-BUILT PART LIST STS-7 11/17/89

## SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1050097-07(901)	SHIM	
1050097-08	SHIM	0016
		0014
		0009
1050097-08(901)	SHIM	0016
1050097-09	SHIM	0015
		0014
		0009
1050097-09(901)	SHIM	
1050097-10	SHIM	0016
		0015
		0014
		0009
1050097-10(901)	SHIM	
1050129-07	CASE SEGMENT,AFT	0028
1050129-07 R01	CASE SEGMENT,AFT	0028
1050129-07(901)	AFT CASE SEG	
1050131-09 R01	CASE SEG,CYLINDER	0019
		0017
		0016
		0014
1050131-09(901) R01	CYLINDRICAL CASE SEG	
1050147-08	CASE ASSY FWD SEG	0023

## AS-BUILT PART LIST STS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
-----	-----	----
1050150-11	IGNITER, ADAPT ASSY	0012
		0011
		0010
		0009
		0008
1050150-11(901)	PREPARE IGN. ADAPTER	
1050152-03	CHAMBER, LINED	0005
1050152-04	CHAMBER, INSUL	0008
		0006
		0005
1050152-06	INIT CHAMBER LOADED	0007
		0005
1050152-07	CHIMBR ASSY, INIT	0008
		0006
		0005
1050154-01	CHAMBER	0003
		0002
1050188-07	R01 PRESSURE, TRANSDUCER	0007
1050188-07	R02 PRESSURE, TRANSDUCER	0007
1050188-09	R01 PRESSURE, TRANSDUCER	0007
1050188-09	R02 PRESSURE, TRANSDUCER	0007
1050208-06	EXIT CONE	0020
1050208-07	EXIT CONE ASSY, FWD	0021

## AS-BUILT PART LIST STS-7 11/17/89

## SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
-----	-----	----
1050210-14	PLUG, SILICA CLOTH	0026
1050210-15	CAPLUG	0034
1050210-44	NOSE THROAT	0042
1050210-45	NOSE THRT BRG	0042
1050210-46	NOSE THRT BRG COWL	0042
1050210-47	NOS THRT BRG CWL HSG	0043
		0042
1050210-48	NZLE ASSY, FWD SECT	0043
		0042
1050212-08	INSULATION	0018
1050212-10	HSG ASSY, NOZ FIXED	0023
		0019
		0018
1050214-05	THROAT RING	0014
1050214-06	THROAT INLET ASSY	0014
1050214-07	THROAT, INLET ASSY	0015
		0014
1050228-01	PACKING, PREFORMED	0015
		0013
1050228-02	PACKING, PREFORMED	0013
1050228-03	PACKING, PREFORMED	0013
1050228-04	PACKING, PREFORMED	0013
1050228-05	PACKING, PREFORMED	0013

AS-BUILT PART LIST STS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1050228-06	PACKING, PREFORMED	0013
		0012
1050228-07	PACKING, PREFORMED	0013
1050228-08	PACKING, PREFORMED	0013
1050228-10	PACKING, PREFORMED	0013
1050228-15	PACKING, PREFORMED	0015
		0013
1050228-18	PACKING, PREFORMED	0013
1050228-20	PACKING, PREFORMED	0013
1050228-22	PACKING, PREFORMED	0013
1050228-24	PACKING, PREFORMED	0015
		0013
1050230-16	R01 TEE SECTION	0008
1050230-16	R02 TEE SECTION	0013
		0010
		0009
1050230-16	R03 TEE SECTION	0008
1050230-17	R02 SPLICE PLATE	0008
1050230-18	R01 TEE SECTION	0013
		0010
		0009
1050230-18	R02 TEE SECTION	0013
		0010
		0009

AS-BUILT PART LIST STS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1050230-18	R03 TEE SECTION	0008
1050230-19	R02 SPLICE PLATE	0008
1050230-25	R02 PLATE	0008
1050230-27	TEE SECTION	0020
1050230-27	R03 TEE SECTION	0013
		0010
		0009
		0008
1050230-28	R02 ADAPTER	0008
1050230-29	STIFFENER RING	0021
		0020
1050230-30	SPLICE PLATE	0021
		0020
1050230-31	ADAPTER ASSY	0021
		0020
1050230-32	PLATE ASSY	0021
		0020
1050253-03	PLATE, IDENTIFICATION	0002
1050257-01	TUBE NONMETALLIC	0002
1050262-01	INSERT	0002
		0001
1050266-01	R03 ARMING MONITOR	0008
		0007
1050266-01	R04 ARMING MONITOR	0008

## AS-BUILT PART LIST STS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
-----	-----	----
1050278-08	R03 ADAPTER IGNITER	0013
1050279-07	CHAMBER, IGNITER	0005
1050279-08	R04 CHAMBER, IGNITER	0010
		0009
1050279-08	R05 CHAMBER, IGNITER	0010
		0009
1050298-01	SCREW,CAP,SOC HD	0003
		0002
1050481-01	SETSCREW	0002
		0001
1050492-03	LABEL	0003
1050492-05	LABEL	0003
1050691-01	COVER	0001
1050694-01	CUSHION	0001
1050715-01	CSE SEG,STFFNR LT WT	0004
		0003
1050715-01(901)	CASE SEGMENT STIFFEN	
1050716-01	CASE SEG,ATTCH LT WT	0003
1050716-01(901)	LT WT ATTACH	
1050717-01	CASE SEG,CYLDR LT WT	0007
		0006
1050717-01(901)	CYL. CASE SEG. LIGHT	
1050719-01	RTNR SHPD CHARGE	0001



## AS-BUILT PART LIST STS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1050727-01	STRMR ASSY, SERIALZD	0003
		0002
		0001
1050730-01	FLOOR PLATE ASSY	0001
1050730-02	FLOOR PLATE ASSY	0001
1050730-03	FLOOR PLATE ASSY	0001
1050730-04	FLOOR PLATE ASSY	0001
1050730-05	FLOOR PLATE ASSY	0001
1050731-01	TRNSDUCER BOLT ASSY	
1050731-02	XDUCER BOLT ASSY	
1050745-04	CABLE ASSY	0008
		0004
1050746-01	INSUL, FIELD&SKRT JNT	0001
1050746-02	INSUL, FIELD&SKRT JNT	0002
		0001
1050746-03	INSUL, FIELD&SKRT JNT	0001
1050746-04	INSUL, FIELD&SKRT JNT	0001
1050747-09	STRAP KIT.	0012
		0010
		0008
1050753-01	PLUG	
1050767-01	BASE, CABLE MNING	
1050771-01	INSULATOR, CORK	
1050798-01	PLUG, TUBE ASSY	0003

AS-BUILT PART LIST SIS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1051055-01	R01 PIN, STRAIGHT HEADLES	0017
		0012
		0011
		0010
		0009
		0006
		0005
		0004
		0003
		0002
1051055-02	R01 PIN, STRAIGHT HDLESS	0017
1051055-03	PIN, STRAIGHT HDLESS	0017
1051058-01	CBL, LTNG BYPSS, NOZ	0002
		0001
1051060-01	R06 BEARING ASSY	0005
		0004
		0003
		0002
1051060-02	BEARING ASSY	0005
		0004
		0003
		0002
1051060-12	R02 BEARING ASSY	0026
1051060-12(901)	BEARING ASSY	

## AS-BUILT PART LIST STS-7 11/17/89

## SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1051060-13	BEARING ASSY	0026
1051061-01	SNUBBER	0004
		0003
		0002
		0001
1051061-02	SNUBBER SEG NOZZLE	0011
1051061-02	R02 SNUBBER SEG NOZZLE	0007
		0006
		0005
1051063-03	R02 RING, SNUBBER SUPPORT	0008
		0007
		0006
1051063-03	R03 RING, SNUBBER SUPPORT	0007
		0006
1051064-01	SHIM, RADIAL	0002
1051065-01	SHIM, RADIAL	0002
1051066-02	R01 RETAINER	0007
		0006
		0005
1051066-02	R02 RETAINER	0007
		0006
		0005
1051066-02	R03 RETAINER	0007
		0006

AS-BUILT PART LIST STS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1051130-05	RING INNER	0015
1051130-06	RING OUTER	0015
1051130-09	BEARING PROTECTOR	0016
		0015
1051135-07	HSNG&BOOT ASSY,NOZ	0012
		0011
		0010
		0009
		0008
		0007
1051139-01	SPACER, PLATE	0001
1051207-04	SCREW, CAP, SOCKET HD	0002
1051207-05	SCREW, CAP, SOCKET HD	0002
1051207-06	SCREW, CAP, SOCKET HD	0002
1051242-05	BRACKET, NOZ ACTUATOR	0085
		0009
1051242-05	R01 BRACKET, NOZ ACTUATOR	0009
1051243-05	R01 SHELL, EXIT CONE AFT	0014
		0013
1051245-01	CLAMP, LOOP	0004
1051246-01	STRAP, RETAINING	0003
		0002
1051254-01	S/A INST KIT	

AS-BUILT PART LIST STS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1051254-02	DRAWING	
1051267-01	PLATE IDENTIFICATION	
1051301-02	RETAINER	0001
1051312-01	RETAINER SHAPED CHGE	0002
1051319-02	END SEAL, SHAPD CHRG	0004
1051358-05	BOOT & HOUSING ASSY	0009
		0008
		0007
		0006
		0005
1051369-02	WASHER, SPECIAL	0002
		0001
1051373-01	TUBE EXPLOS LEAD	
1051406-01	STANDOFF BLAST SHIEL	0002
1051406-04	STANDOFF BLAST SHIEL	0002
1051406-07	STANDOFF BLAST SHIEL	0003
1051406-08	STANDOFF BLAST SHIEL	0003
1051407-02	FLAP BLAST SHIELD	0002
		0001
1051407-03	FLAP BLAST SHIELD	0003
		0002
		0001
1051450-01	R01 BOLT SPECIAL	0003
		0001

AS-BUILT PART LIST SIS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1051450-01	R02 BOLT SPECIAL	0001
1051450-01	R03 BOLT SPECIAL	0001
1051450-01	R04 BOLT SPECIAL	0003
		0001
1051473-01	R01 CASE SEGMENT FWD	0013
1051473-01	R02 CASE SEGMENT FWD	0013
1051473-01(901)	CASE SEGMENT, FWD	
1051475-01	PLUG, MACHINE THREAD	
1051478-02	NOZ SEVERANCE	0081
		0008
		0007
		0006
		0002
1051499-02	NOSE CAP	
1051499-03	NOSE RING, FWD	
1051499-04	INLET RING, AFT	0001
1051499-05	NOSE-INLET ASSY, NOZ	0008
		0007
		0006
		0005
1051569-01	BOLT, MACH	
1051569-02	BOLT	0002
		0001
1051668-01	PLUG, DUAL SEAL	

## AS-BUILT PART LIST STS-7 11/17/89

## SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1051671-01	PLATE IDENTIFICATION	
1051677-01	COWL, FLEX BOOT, NOZZ	0002
		0001
1051684-01	R03 CHMBR ASSY, IGN INSUL	0007
		0006
		0005
		0004
		0003
		0002
		0001
1051684-01(901)	INSULATION PREP IGN	
1051684-02	CHMBR ASSY IGN INSUL	0007
		0006
		0005
1051686-10	IGNITER, ROCKET MOTOR	0020
1051688-01	INSERT, IGNITER	0001
1051702-01	BASKET ASSEMBLY	
1051703-01	BASKET ASSEMBLY	0503
		0004
		0003
		0002
		0001
1051732-02	PACKNG WITH RETAINER	0003
		0002

## AS-BUILT PART LIST STS-7 11/17/89

## SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1051753-01	SPLICE SEAL, STFNR RG	0004
		0001
1051753-02	SPLICE SEAL STFNR RG	0004
		0001
1051754-01	STIFFENER RING-INSUL	0013
		0012
		0011
1051754-02	STIFFENER RING-INSUL	0013
		0012
		0011
1051754-03	STIFFENER RING-INSUL	0013
		0012
		0011
1051766-02	DWG, INSTL, STIF. RING	0017
		0016
		0014
1051766-05	KIT STFFNER RING INST	0017
		0014
1051766-07	STIFFENTER RING KIT	0017
		0016
		0014
1051805-01	INSULATOR, RETAINER	0001
1051817-01	BOOT, FLEX BEARNG, NOZ	0009
		0008



AS-BUILT PART LIST SIS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
-----	-----	----
		0007
		0006
1051817-02	RING, INNER	0006
1051817-03	RING, OUTER	0006
1051839-04	SPACER-BLAST SHIELD	0003
		0002
1051844-01	R01 RING, COMPL, NOZZLE	0002
		0001
1051844-04	R02 RING, COMPL, NOZZLE	0004
1051845-01	PLUG, INSUL, THERMAL	0001
1051851-03	LBL, FLIGHT MTR-SRM	0003
		0001
1051851-04	LABEL, FLIGHT MTR-SRM	0003
		0001
1051864-01	PLATE	0001
1051864-02	STRAP SYS TUNNEL	
1051864-03	STRAP SYS TUNNEL	
1051864-04	STRAP SYS TUNNEL	
1051864-05	STRAP SYS TUNNEL	
1051873-01	WIRING HARNESS	0001
1051882-01	IGNITER LOADED	0003
		0002
		0001
1051882-02	CHAMBER, LINED	

## AS-BUILT PART LIST STS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1051894-01	DISC, SEAL IGNITER SRM	
1051899-04	RETAINER, PIN	
1051915-01	CRTRDGE SEALANT ADH	0001
1051915-02	CRTRDGE SEALANT ADH	
1051915-03	CRTRDGE SEALANT ADH	0001
1051916-01	CARTRIDGE ASSY	0002
		0001
1051916-02	CARTRIDGE & SEALANT	0001
1051916-03	CARTRIDGE & SEALANT	0001
1051917-01	NOZ, SLNT/ADHESIVE	
1051917-02	NOZ, DUCKBILL	0001
1051925-01	R00 GASKET MODIFIED S/A	0003
		0002
		0001
1051925-01	R01 GASKET MODIFIED S/A	0004
		0003
		0002
		0001
1051926-01	R00 GASKET, INNER	0004
		0003
		0002
		0001
1051927-01	R01 GASKET-OUTER	0005
		0004

## AS-BUILT PART LIST STS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
-----	-----	----
		0003
		0002
		0001
1051936-01	EXIT CONE NOZ AFT	0001
1051936-02	EXIT CONE NOZ AFT	
1051936-03	EXIT CONE NOZ AFT	0002
1051937-01	SHIM, CMLPLNCE RING	
1051942-01	EXIT CONE SUB ASSY	
1051942-01(901)	P.P.C.	
1051944-01	EXIT CONE ASY NOZ AF	0004
		0001
1051944-100	EXIT CONE ASSY	0001
1051945-01	THERMOCOUPLE ASSY	
1051964-01	CAP, PROTECTIVE	
1051999-01	SEG SUB ASSY	0001
1051999-02	SEG SUB ASSY	0002
		0001
1052113-04	CASE ASSY-FWD SEG	0016
		0015
		0014
1052113-04(901)	PREPARE INSUL FWD SE	
1052113-04(903)	ACCEPT CRTI INSUL SE	
1052133-01	SEG SUB ASSY	0002
		0001

## AS-BUILT PART LIST STS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1052133-01(901)		
1052133-01(903)	X-RAY SEG	
1052133-02	SEG SUB ASSY	0002
1052134-01	SEGMENT, LOADED, AFT	0003 0002
1052134-01(901)		
1052134-01(903)	PPC LOADED AFT SEG A	
1052134-02	SEGMENT, LOADED, AFT	
1052135-01	INSULATED CASE	0003 0002 0001
1052135-01(901)	PREPARE INSUL CTR SE	
1052135-01(903)	CENTER SEG CHEMLOCK	
1052136-01	CASE ASSY, AFT SEG	0003 0002
1052136-01(901)	PREPARE INSUL AFT SE	
1052149-01	FWD SEG, CABLE MNTNG	
1052150-01	TUNNEL ASSY, CTR SEG	0092 0091 0090
1052152-01	AFT SEG, RKT MTR INST	0002

## AS-BUILT PART LIST STS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
-----	-----	----
		0001
1052154-01	TUNNEL ASSY, FWD SEG	
1052155-01	TUNNEL ASSY, AFT SEG	0001
1052158-01	AFT DOME INSULATED	0003
		0002
		0001
1052158-01(901)	PRECUT INSUL KIT	
1052161-01	AFT DOME PAINTED	0003
		0002
1052161-01(901)	AFT DOME PAINTED & C	
1052175-01	CASE ASSY, SEG	0002
1052175-01(901)	ASSY LT WT CTR	
1052177-01	BARREL ASSY, COATED	0001
1052177-01(901)	AFT SEG CHEM ASSY	
1052177-01(902)	DOME SEG	
1052178-01	BARREL ASSY, COATED	0002
1052178-01(901)	CASE SEGMENT STIFFEN	
1052204-01	SEG, RKT MTR, FWD	0002
		0001
1052204-01(902)	PREPARE TPS PPC	
1052208-01	SEG, RKT MTR, CTR	0002
		0001
1052208-01(902)	PREPARE TPS PPC	
1052208-02	SEG, RKT MTR, CTR	0002

AS-BUILT PART LIST STS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1052208-02(902)	PREPARE TPS PPC	0001
1052210-01	SEG, RKT MTR, AFT	0002
		0001
1052210-01(902)	PREPARE TPS PPC	
1052242-01	R01 RING, CMLNCE, NOZZLE	
1052285-01	IGN SYS FWD SEG ASSY	0003
		0002
		0001
1052286-01	SEGMENT, LOADED, FWD	0002
		0001
1052286-01(901)	CAST FWD SEG	
1052286-01(903)	FORWARD CASTING SEG	
1052286-02	SEGMENT, LOADED, FWD	
1052293-01	BARRIER-BOOSTER	0002
		0001
1052293-01	R02 BARRIER-BOOSTER	0007
		0006
		0005
		0004
1052294-01	BARRIER BOOSTER ASSY	0002
		0001
1052295-01	S/A DEVICE	
1052296-01	PACKING, PREFORMED	

AS-BUILT PART LIST SIS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1052302-01	BLAST SHIELD	
1052305-01	TUBE-ORNANCE CABLE	0001
1052306-01	RING SEGMENT	0002
1052306-02	RING SEGMENT	0001
1052306-05	RING SEGMENT	0002
1052307-01	CLAMP, INITIATOR	
1052308-01	NUT	
1052336-01	CLAMP, CABLE	
1052337-01	CLAMP, CABLE	
1052340-01	CABLE, MESSENGER	
1052341-04	SEVERANCE CABLE	0002
		0001
1052342-01	BRACKET, CABLE	
1052342-02	BRACKET, CABLE	
1052349-01	SPLICE PLATE ASSY	0001
1052349-02	SPLICE PLATE ASSY	0001
1052349-03	SPLICE PLATE ASSY	0001
1052350-01	FIELD SLICE PLATE	0002
1052350-02	FIELD SPLICE PLATE	0001
1052350-03	FIELD SPLICE DWG	0002
		0001
1052351-01	FWD SPLICE PLATE KIT	0003
		0002

## AS-BUILT PART LIST STS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1052351-02	FWD SPLICE PLATE KIT	0002
1052351-03	FWD SPLICE PLATE DWG	0003
		0002
1052352-01	PAD, PREMOLDED	
1052352-02	PAD, PREMOLDED	
1052352-03	PAD, PREMOLDED	
1052353-01	PROTECTIVE COVER	0001
1052354-02	BRACKET, CABLE	0001
1052356-01	CABLE GUIDE	0001
1052449-03	PLUG, PROTECT, NOZZLE	
1052472-01	FWD SKIRT INSTL	0002
		0001
1052472-02	FWD SKIRT INSTL	0001
1052472-03	FIELD JOINT INSTL	0001
1052472-04	A/C AFT INSTL	0001
1052472-05	AFT SKIRT INSTL	0001
1052472-06	DRAWING	0002
		0001
1052510-01	BOLT, 12 POINT	
1052519-01	EXIT CONE KIT/INSTLL	
1052519-02	EXIT CONE KIT/INSTLL	0001
1052519-04	DRAWING	0001



AS-BUILT PART LIST STS-7 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
8051965-01	CONTAINER, SHP&STRAGE	0003
		0002
		0001
8052297-01	CAP ASSY-FARADAY	

## FLIGHT 15 AS-BUILT CONFIGURATION

The Flight 7 and Flight 15 reports consist of data extracted from the as-built configuration files in IMS for each flight set. Listed on the reports are the part number, description, and the ECO/SCN for each part. The reports were generated by Data Management.

NOTE: FLIGHT SET 8 THROUGH 14 DATA ARE AVAILABLE FROM IMS ON REQUEST THROUGH MSFC PROJECT OFFICE. FLIGHTS 7 AND 15 WERE SELECTED AS THE FIRST AND LAST FLIGHTS IN THE CONTRACT AND ARE TYPICAL OF THE OTHER FLIGHTS.

## Flight 15 As-Built Configuration

AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
STW3-2654	SS S/A ACPT/TEST	0004
STW3-2717	MOLD INSERT, IGN NOZ	
STW3-2864	CABLE ASY NOZ SEVR	0009
		0006
STW3-3134	TUBING, POLYURETHANE	
STW3-3137, TY.1	CABLE, ELEC, DBL	
STW3-3137, TY.3	CABLE, ELEC, DBL	
STW3-3168	NOZZLE PLUG, FOAM	0003
		0002
		0001
STW3-3176	IGNITER, SOLID RKT	
STW4-2528	T-RING CAP EXTRUSION	0004
		0003
		0002
		0001
STW4-2529	THERMAL INSULATION	0004
		0003
		0002
		0001
STW4-2530	TEE SEGMENT	0004
		0003
		0002

AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
-----	-----	----
STW4-2531	EXTRSN INHBTR FLLR	0003
		0002
		0001
STW4-2535	DOMF FLLR EXTRUSION	0003
		0002
		0001
STW4-2536	THERMAL INSULATION	0004
		0003
		0002
		0001
STW4-2545	INSULATION	0002
		0001
STW4-2546	INSULATION	0002
		0001
STW4-2547	INSULATION	0002
		0001
STW4-2563	INSULATION	
STW4-2563, 1.00	INSULATION	
STW4-2563, 2.00	INSULATION	
STW4-2565	INSULATION	0002
		0001
STW4-2600	TERPOLYMER	0002
		0001

AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
STW4-2601	EPOXY RESIN	0002
		0001
STW4-2602	AMMONIUM PERCHLORATE	0006
		0005
		0004
		0003
		0002
STW4-2603	ALUMINUM POWDER	0007
		0006
STW4-2604(7779)	IRON OXIDE	0002
		0001
STW4-2604, TY.2	FERRIC OXIDE	0006
		0004
		0003
STW4-2621	INSUL.,.200 THK	0023
		0022
		0019
		0018
		0017
		0016
		0015
		0010
		0009
		0008

AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
-----	-----	----
STW4-2636	FLOATS PULP	0001
STW4-2644	LIQUID POLYMER	0002
		0001
STW4-2645	IRON HEXOATE	0001
STW4-2646	EPOXY RESIN	0002
		0001
STW4-2647	PHSPHNE OXIDE (MAPO)	
STW4-2648	THIXOTROPIC POWDER	0001
STW4-2679	SILICON DIOXIDE	
STW4-2680	CURING AGENT	
STW4-2700	CORK, SHEET	0010
		0008
		0007
		0006
STW4-2700, .375	CORK, SHEET	0008
		0007
		0006
STW4-2736	EPDM, SILICA FILLED	0009
		0008
		0007
		0006
		0005
		0004

AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
STW4-2806	LUBRICANT	0003
STW4-2832	ALUMIUM POWDER	0002
STW4-2847	PUTTY, VACUUM SEAL	0001
STW4-2847, TY. 1	PUTTY, VACUUM SEAL	0001
STW4-2847, TY. 2	PUTTY, VACUUM SEAL	0008
STW4-2847, TY. 2,	PUTTY, VACUUM SEAL	0007
STV4-2852	MATL SPEC SLCH	0008
STV4-2868	INSULATION	0007
STV4-2871	FABRIC, CARBON	0009
STV4-2874	ELECT. CONDUCTV CMPO	0008
STV4-2886	BINDER, PLASTIC, RESIN	0007
STV4-2887	BOKON POWDER	0006
		0005
		0002
		0001

AS-BUILT PART LIST SKM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
STW4-2919	THREAD, NYLON	0001
STW4-2928	DYE, PHENOL RED	0001
STW4-2955	LUBRICANT	0002
		0001
STW4-2987	CORK	0001
STW4-3174	EPDM	0001
STW5-2649	LINER, CRBN CLOTH	0018
		0017
		0016
		0015
		0014
		0013
STW5-2650	INSUL CMPD THERMAL	0008
		0007
		0006
		0005
		0004
STW5-2650(901)	INSUL CMPD THERMAL	
STW5-2651	SPLIT GLASS BRDGDS	0012
		0011
		0010
STW5-2652	SILICA CLOTH PHEN	0011
		0010



AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCH
-----	-----	-----
		0009
		0008
		0007
		0002
		0001
STW5-2656	ADHESIVE PRIMER	0005
STW5-2657	ADHESIVE	0006
STW5-2664	PRIMER	0003
		0002
		0001
STW5-2665	ADHESIVE	0002
		0001
STW5-2667	MDLNG CORP CHOP SILL	0003
		0002
STW5-2672	COATING	0006
		0005
		0004
		0003
		0002
		0001
STW5-2672 (7235)	COATING	0006
		0005
		0004

## AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN ----
-----	-----	0003
STW5-2672, WHITE	COATING	0002
		0001
		0006
		0005
		0004
		0003
		0002
		0001
STW5-2676	LINER	0008
STW5-2678	SEALANT	0001
STW5-2678(902)	SEALANT	
STW5-2702	IGNITION GRANULES	0002
		0001
STW5-2712	ADHESIVE	0003
		0002
		0001
STW5-2723	RUBBER COMPOUND	0002
		0001
STW5-2725	PRIMER	0004
		0003
STW5-2738	RUBBER SILICONE	0013
		0012

AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
-----	-----	0011
		0010
		0009
		0008
STW5-2776	COATING	0001
STW5-2782	COMP, NAT RBBR UNCRD	0001
STW5-2783	CEMENT, NAT RBR-BASE	0002
		0001
STW5-2788	MKNG ENAMEL, BLK	
STW5-2792	PROPELLANT	0005
		0004
		0003
		0002
		0001
STW5-2798	ADHESIVE	0002
		0001
STW5-2810	ADHESIVE	0004
		0003
STW5-2810(901)	ADHESIVE	
STW5-2811	ADHESIVE	0008
		0007
		0006
		0005

AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
SIW5-2813	SEALANT, RTV	0006
		0005
		0004
		0003
		0002
		0001
SIW5-2830	ADHES PATIRNNG CLOTH	0002
		0001
SIW5-2833	PROPELLANT	0003
		0002
SIW5-2835	POTTING COMP	0005
		0004
		0002
SIW5-2845	ACC CRIT NOZZ COMP	0010
		0009
		0008
SIW5-2849	BONDING AGENT	0003
		0002
SIW5-2859, TY. 1		0004
		0003
SIW5-2879	EPOXY PASTE	0004
		0003
		0002
		0001

AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
STW5-2885	BORON PELLETS	
STW5-2898	ADHESIVE	0003
		0002
STW5-2914	PRIMER REQMT SPEC	0005
		0003
		0002
		0001
STW5-2914(6656)	PRIMER REQMT SPEC	0003
		0002
		0001
STW5-2922	BOSTIK COATING	0008
		0007
		0004
		0003
		0002
		0001
STW5-2931	ADHESIVE	0003
		0002
		0001
STW5-2936	BONDING AGENT	
STW5-2940	TAPE, TEFLON	0001
STW5-2942	O-RING LUBRICANT	0006
		0005
		0004

AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
-----	-----	-----
		0003
		0002
		0001
STW5-2943	ELASTOMER	0004
STW5-2953	INHIBITOR	0006
		0005
STW5-2975	POTTING COMPOUND	0001
STW5-2976	ADHESIVE, FLEXIBLE	0003
STW5-2984	TORQUE SEAL	
STW5-2994	COATING	0002
		0001
STW5-2995	PRIMER	
STW5-2998	SEALANT	
STW5-3135	HOLDING COMPOUND, POL	
STW5-3136	FOAM, URETHANE	
STW5-3154	SILICONE RUBBER, RTV	0001
STW5-3156	FOAM, URETHANE	0002
		0001
STW5-3166	PRIMER	0001
STW5-3183	ABLATION COMPOUND	0001
STW7-2559	REFURBISHED BOLTS	0002
STW7-2560	REFRSHD STFFNR RINGS	0004
		0003
		0002

AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
-----	-----	----
		0001
SIW7-2675	INSP, IGN INIT CIMBR	0005
		0004
SIW7-2684	MASS PROPERTIES REQ.	0017
		0016
		0015
SIW7-2686	ACCPY REFUR IGN CMP	0006
		0005
		0004
SIW7-2692	LEAK TEST	0011
		0010
		0009
SIW7-2698	INSP. NONDESTRUCT, IGN	0007
		0006
		0005
		0004
SIW7-2699	PKG, HANDLING, TRANS	0002
		0001
SIW7-2699, CL. 1		0002
		0001
SIW7-2699, CL. 4	PKG, HANDLING, TRANS	0001
SIW7-2713	LOADED SEG INSP	0012
		0011

AS-BUILT PART LIST SRM-15 11/17/89

## SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
-----	-----	----
		0010
		0009
SIW7-2731	INLET FITTING	0002
		0001
SIW7-2740	ACCEPT NOZ FLX BRG	0013
		0010
		0009
SIW7-2744	ACPT CRIT REFUB CASE	0017
		0016
		0014
		0013
SIW7-2747	LEAK TEST CASE SEAL	0007
		0006
		0005
		0004
		0003
		0002
SIW7-2778	SRM NONFLT HDWR IDEN	0002
		0001
SIW7-2786	ACCEPTANCE CRITERIA	0005
SIW7-2787	LEAK TEST,IGNITER	0005
SIW7-2790	IGNITION SYS GASKET	0006
SIW7-2791	PROCESS SPEC	0002
		0001



## AS-BUILT PART LIST SRM-15 11/17/89

## SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
SIW7-2793	STD PROPELLANT	0004
		0003
		0002
		0001
SIW7-2831	INSP INSLTN CMPTS	0002
		0001
SIW7-2843	STD IGN SYS PROPLNT	0006
		0005
		0004
		0003
		0002
		0001
SIW7-2844	S/A ELECT CHECKOUT	0008
		0007
SIW7-2853	LEAK TEST	0002
SIW7-2859, TY.1	TENSILE ADH BUTTON	0004
		0003
SIW7-2859, TY.2	CURE CUP HARDNESS	0004
		0003
SIW7-2860, TY.2	ACCEPT/TEST BONDING	0003
SIW7-2863	ACCP REFRB NOZ CMP	0016
		0014
		0013

AS-BUILT PART LIST SRM-15 11/17/89

## SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
SIW7-2865, TY.1	THERMAL INSUL COMPD	0003
		0002
		0001
SIW7-2865, TY.2	THERMAL INSUL COMPD	0003
		0002
		0001
SIW7-2865, TY.3	ACCP. TEST INSUL	0003
		0002
		0001
SIW7-2869	ACCP/REFURB BOLT	0004
		0003
		0002
		0001
SIW7-2883	ACCEPTANCE TEST	0002
		0001
SIW7-2883, TY.2	ACCEPT TEST	0002
		0001
SIW7-2913	LEAK TEST PROC.	0006
		0005
SIW7-2937	ARMING MONITOR ASSY	0003
		0002
SIW7-2941	ACCEPT TEST, ADHESIVE	0002
		0001
SIW7-2990	PREPARATION ACPT	

AS-BUILT PART LIST SRM-15 11/17/89

## SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
SIW7-2991	ACCEPT TEST, BOND	0012
		0011
SIW7-3169	PYROTECHNIC ITEMS	
SIW7-3178	SEALANT, SILICONE, RTV	
SIW7-3179	X-RAY	
SIW7-3193	NOZZLE, AFT SEG ASSY	0001
SIW7-3219	ACCEPT TEST, ABLATION	
SIW7-500	MARKING METHOD	0007
		0010
		0008
		0007
		0006
101100269-01	PLUG, MACHINE THREAD	0001
10500046-01	INSULATION	0002
		0001
10500082-05	R01 EXIT CONE HOUSING	0016
		0015
10500082-05	R04 EXIT CONE HOUSING	0007
		0006
10500082-05(903)	EXIT CONE HOUSING	
10500083-02	KING, AFT END	0018
10500083-02(901)	KING, AFT END	
10500084-05	NOSE/INLET, NOZZLE	0022
		0021

AS-BUILT PART LIST SRM-15 11/17/89

## SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1050084-06	HSNG NOSE, INLET NOZ	0022
		0021
1050084-06	R01 HSNG NOSE, INLET NOZ	0022
		0021
1050084-06(901)	NOSE/INLET HSG	
1050085-02	RING, FWD END	0021
		0020
		0019
		0018
		0017
		0016
		0015
		0014
1050085-02(901)	RING, FWD END	
1050086-03	HOUSING, COWL, NOZ.	0014
		0013
		0012
		0011
1050086-03(901)	HOUSING, COWL, NOZ.	
1050086-05	R01 HOUSING, COWL, NOZ.	0015
		0013
		0012
		0011
1050086-05(901)	HOUSING, COWL NOZZLE	

AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1050087-05	R01 HSG THR SUPP NOZZLE	0017
		0016
1050087-05	R03 HSG THR SUPP NOZZLE	0010
1050087-05(903)	HSG THR SUPP NOZZLE	
1050088-05	R02 HOUSING, NOZZLE-FIXED	0015
		0014
		0013
1050088-05(903)	HOUSING, NOZZLE - FIX	
1050097-01	SHIM	0018
		0017
		0016
		0014
1050097-01(901)	SHIM	0018
1050097-02	SHIM	0017
		0016
		0014
1050097-02(901)	SHIM	
1050097-03	SHIM	0018
		0017
		0016
		0014
1050097-03(901)	SHIM	
1050097-04	SHIM	0018

## AS-BUILT PART LIST SRM-15 11/17/89

## SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
-----	-----	----
1050097-04(901)	SHIM	0016
1050097-05	SHIM	0014
		0018
		0017
		0016
		0014
1050097-05(901)	SHIM	
1050097-06	SHIM	0018
		0017
		0016
		0014
1050097-06(901)	SHIM	
1050097-07	SHIM	0016
		0014
1050097-07(901)	SHIM	
1050097-08	SHIM	0018
		0017
		0016
		0014
1050097-08(901)	SHIM	
1050097-09	SHIM	0018
		0017

AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
-----	-----	----
		0016
		0015
		0014
1050097-09(901)	SHIM	0018
1050097-10	SHIM	0017
		0016
		0015
		0014
1050097-10(901)	SHIM	0033
1050129-07	CASE SEGMENT, AFT	0032
		0031
		0030
		0029
1050129-08	CASE SEGMENT, AFT	0036
1050129-08(901)	CASE SEGMENT	
1050131-09	CASE SEG, CYLINDER	0026
1050131-09	R01 CASE SEG, CYLINDER	0026
1050131-10	R02 CASE SEG, CYLINDER	0030
1050131-10	R03 CASE SEG, CYLINDER	0030
1050131-10(901)	CASE SEGMENT	
1050150-11	IGNITER, ADAPT ASSY	0012
		0011

AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
-----	-----	----
1050152-03	CHAMBER, LINED	0010 0009 0008 0009 0005
1050152-04	CHAMBER, INSUL	0008 0006 0005
1050152-06	INIT CHAMBER LOADED	0010 0009 0007 0005
1050152-07	CHMBR ASSY, INIT	0010 0008 0006 0005
1050154-01	CHAMBER	0003 0002
1050188-07	R01 PRESSURE, TRANSDUCER	0011
1050208-06	EXIT CONE	0024 0023
1050208-07	EXIT CONE ASSY, FWD	0020 0025 0021



AS-BUILT PART LIST SKM-15 11/17/89

## SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1050208-07(902)	FWD EXIT CONE	0020
1050212-08	INSULATION	0027
		0025
		0024
		0018
1050212-10	HSNG ASSY, NOZ FIXED	0027
		0026
		0023
		0022
		0019
		0018
1050228-01	PACKING, PREFORMED	0015
		0013
1050228-02	PACKING, PREFORMED	0015
		0013
1050228-03	PACKING, PREFORMED	0015
		0013
1050228-04	PACKING, PREFORMED	0015
		0013
1050228-05	PACKING, PREFORMED	0015
		0013
1050228-06	PACKING, PREFORMED	0015
		0013

## AS-BUILT PART LIST SRM-15 11/17/89

## SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1050228-07	PACKING, PREFORMED	0015
		0013
1050228-08	PACKING, PREFORMED	0015
		0013
1050228-10	PACKING, PREFORMED	0013
1050228-15	PACKING, PREFORMED	0019
		0018
		0015
		0013
1050228-18	PACKING, PREFORMED	0015
		0013
1050228-20	PACKING, PREFORMED	0013
1050228-22	PACKING, PREFORMED	0015
		0013
1050228-24	PACKING, PREFORMED	0017
		0015
		0013
1050228-25	PACKING, PREFORMED	0016
		0015
		0013
1050253-03	PLATE, IDENTIFICATION	0002
1050257-01	TUBE NONMETALLIC	0002
1050262-01	INSERT	0002
		0001

AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1050266-01	ARMING MONITOR	0010
		0009
		0008
		0007
1050266-01	R02 ARMING MONITOR	0008
		0007
1050278-08	R01 ADAPTER IGNITER	0017
		0015
1050279-08	R01 CHAMBER, IGNITER	0011
		0010
		0009
1050298-01	SCREW, CAP, SOC HD	0003
		0002
1050452-01	SEG, RKT MTR, FWD	0101
		0002
1050452-01(902)	SEG, RKT MTR, FWD	
1050453-01	SEG, RKT MTR, CTR	0003
1050453-01(902)	SEG, RKT MTR, CTR	
1050453-02	SEG, RKT MTR, CTR	0003
1050453-02(902)	TPS CORK CTR AFT SEG	
1050454-01	SEG-ROCKET MTR, AFT	0004
		0003
		0002
1050454-01(902)	SEG, RKT MTR, AFT	

AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1U50456-01	FWD SUB ASSY	
1U50457-01	SEGMENT, AFT-CABLE	0001
1U50459-01	TUNNEL ASSY, FWD SEG	
1U50460-01	TUNNEL ASSY, CNTR SEG	0001
1U50461-01	TUNNEL ASSY, AFT SEG	
1U50463-01	IGN SYS FWD SEG ASSY	
1U50464-01	NOZZLE ASSY, AFT SEG	0512
1U50466-01	SEG, HPM LOADED, FWD	
1U50466-01(901)	SEG, HPM LOADED, FWD	
1U50466-02	LINED CASE	
1U50467-01	SEG, HPM LOADED, CTR	0002
1U50467-01(901)	SEG, HPM LOADED, CEN	
1U50467-02	SEG, HPM LOADED, CTR	0001
1U50468-01	SEG, HPM LOADED, AFT	
1U50468-01(901)	SEG, HPM LOADED, AFT	
1U50468-01(903)	SEG, HPM LOADED, AFT	
1U50468-02	SEG, HPM LOADED, AFT	0001
1U50470-01	CASE ASSY, HPM FWD	0002
		0001
1U50470-01(901)	CASE ASSY, HPM FWD	
1U50470-01(903)	CASE ASSY, HPM FWD	
1U50471-01	CASE ASSY, HPM CEN	0001
1U50471-01(901)	CASE ASSY, HPM CEN	
1U50471-01(903)	CASE ASSY, HPM CEN	

AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1050472-01	CASE ASSY,HPM AFT SEG	0001
1050472-01(901)	INSUL KIT AFT SEG	
1050473-01	CASE ASSY,FWD SEG	0002
		0001
1050474-01	CASE ASSY,CYLINDRICAL	0003
1050481-01	SETSCREW	0003
		0002
		0001
1050492-03	LABEL	0003
1050492-05	LABEL	0003
1050502-01	AFT DOME, INSULATED	
1050502-01(901)	AFT DOME, INSULATED	
1050503-01	AFT DOME, PAINTED	
1050503-01(901)	AFT DOME, PAINTED	
1050504-01	BARREL ASSEMBLY	0003
		0002
		0001
1050504-01(901)	BARREL ASSEMBLY	
1050504-01(902)	BARREL ASSEMBLY	
1050506-01	BARREL ASSY,AFT SEG	0004
		0003
		0002
		0001
1050506-01(901)	BARREL ASSY,AFT SEG	

## AS-BUILT PART LIST SRM-15 11/17/89

## SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1050691-01	COVER	0001
1050694-01	CUSHION	0001
1050715-01	CSE SEG,STFFNR LT WT	0009
		0008
		0007
		0006
		0005
		0004
		0003
1050715-02	R01 CASE SEG,STFNR LT WT	0010
1050715-02	R02 CASE SEG,STFNR LT WT	0010
1050715-02(901)	CASE SEGMENT	
1050716-01	CASE SEG,ATTCH LT WT	0008
		0007
		0006
		0005
		0004
		0003
1050/16-02	CASE SEG,ATTCH LT WT	0011
1050716-02	R01 CASE SEG,ATTCH LT WT	0011
1050/16-02(901)	CASE SEG ATTCH LT WT	
1050/17-01	CASE SEG,CYLDR LT WT	0012
		0011
		0010

AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
-----	-----	-----
		0009
		0008
		0007
		0006
1050717-02	R01 CASE SEG, CYLDR LT WT	0013
1050717-02	R02 CASE SEG, CYLDR LT WT	0013
1050717-02(901)	CASE SEGMENT	
1050727-01	STRMR ASSY, SERIALZD	0003
		0002
		0001
1050731-01	TRNSDUCER BOLT ASSY	0002
1050731-05	TRNSDUCER BOLT ASSY	0004
1050743-06	MARKING DRAWING-SRM	0001
1050746-01	INSUL, FIELD&SKRT JNT	0004
		0003
		0002
		0001
1050746-02	INSUL, FIELD&SKRT JNT	0004
		0003
		0002
		0001
1050746-03	INSUL, FIELD&SKRT JNT	0004
1050746-04	INSUL, FIELD&SKRT JNT	0004
1050753-01	PLUG	

AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1050767-01	BASE, CABLE MNTNG	
1050771-01	INSULATOR, CORK	
1050798-01	PLUG, TUBE ASSY	0003
1051055-01	R01 PIN, STRAIGHT HEADLES	0017
1051058-01	CBL, LTNG BYPASS, NOZ	0003
		0002
		0001
1051060-12	R01 BEARING ASSY	0030
		0029
		0028
		0027
		0026
1051060-12(901)	BEARING ASSY	
1051060-13	BEARING ASSY	0030
		0029
		0028
		0027
		0026
1051061-01	SNUBBER	0003
		0002
		0001
1051061-02	R01 SNUBBER SEG NOZZLE	0014
		0013
		0012



AS-BUILT PART LIST SKM-15 11/11/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
-----	-----	----
1051061-02	R02 SNUBBER SEG NOZZLE	0011
		0007
		0006
		0005
1051063-01	RING, SNUBBER SUPPORT	0004
		0003
		0002
		0001
1051063-03	R01 RING, SNUBBER SUPPORT	0008
		0007
		0006
1051063-03	R03 RING, SNUBBER SUPPORT	0007
		0006
1051064-01	SHIM, RADIAL	0002
1051065-01	SHIM, RADIAL	0002
1051066-01	R01 RETAINER	0003
		0002
		0001
1051066-02	R01 RETAINER	0007
		0006
		0005
1051066-02	R02 RETAINER	0006
		0005

AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1051066-02	R03 RETAINER	0006
		0005
1051130-05	RING INNER	0015
1051130-06	RING OUTER	0015
1051130-09	BEARING PROTECTOR	0018
		0017
		0016
		0015
1051135-07	HSNG&BOOT ASSY, NOZ	0013
		0012
		0011
		0010
		0009
		0008
		0007
1051139-01	SPACER, PLATE	0001
1051207-04	SCREW, CAP, SOCKET HD	0002
1051207-05	SCREW, CAP, SOCKET HD	0002
1051207-07	SCREW, CAP, SOCKET HD	0004
		0003
		0002
1051242-05	R01 BRACKET, NOZ ACTUATOR	0009
1051243-05	SHELL, EXIT CONE AFT	0015
		0014

AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
-----	-----	----
1051245-01	CLAMP, LOOP	0005
		0004
1051246-01	STRAP, RETAINING	0003
		0002
1051254-01	S/A INST KIT	0004
1051254-02	DRAWING	0004
1051267-01	PLATE IDENTIFICATION	
1051301-02	RETAINER	0001
1051312-01	RETAINER SHAPED CHGE	0004
		0002
1051358-05	BOOT & HOUSING ASSY	0010
		0009
		0008
		0007
		0006
		0005
1051369-02	WASHER, SPECIAL	0002
		0001
1051373-01	TUBE EXPLOS LEAD	
1051406-01	STANDOFF BLAST SHIEL	0003
1051406-07	STANDOFF BLAST SHIEL	0003
1051406-08	STANDOFF BLAST SHIEL	0003
1051407-02	FLAP BLAST SHIELD	0004

## AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
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1051407-03	FLAP BLAST SHIELD	0002
		0001
		0004
		0003
		0002
		0001
1051450-01	BOLT SPECIAL	0004
		0003
		0001
		0004
		0003
		0001
1051450-01	R01 BOLT SPECIAL	0004
		0003
		0001
1051473-01	R01 CASE SEGMENT FWD	0021
		0020
		0019
		0018
		0017
		0016
		0015
		0014
1051473-01(901)	CASE SEGMENT, FWD	
1051475-01	PLUG, MACHINE THREAD	
1051499-02	NOSE CAP	0011
		0009

AS-BUILT PART LIST SRN-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1051499-03	NOSE RING, FWD	0005 0011 0010 0009 0005
1051499-04	INLET RING, AFT	0011 0010 0009 0005
1051499-05	NOSE-INLET ASSY, NOZ	0012 0008 0007 0006 0005
1051569-01	BOLT, MACH	
1051569-02	BOLT	0002 0001
1051668-01	PLUG, DUAL SEAL	
1051671-01	PLATE IDENTIFICATION	
1051677-01	CONVL, FLEX BOOT, NOZZ	0006 0005 0004 0003 0002

AS-BUILT PART LIST SRM-15 11/17/89

## SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1051684-01	CHMBR ASSY, IGN INSUL	0008
1051684-02	CHMBR ASSY IGN INSUL	0009
		0008
1051686-10	IGNITER, ROCKET MOTOR	0024
		0022
		0021
		0020
1051688-02	INSERT, IGNITER	0002
1051702-01	BASKET ASSEMBLY	
1051703-01	BASKET ASSEMBLY	0503
		0004
		0003
		0002
		0001
1051732-02	PACKNG WITH RETAINER	0003
		0002
1051805-01	INSULATOR, RETAINER	0001
1051817-01	BOOT, FLEX BEARNG, NOZ	0009
		0008
		0007
		0006
1051817-02	RING, INNER	0011
		0010

## AS-BUILT PART LIST SRM-15 11/17/89

## SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
-----	-----	----
1051817-03	RING, OUTER	0011
		0010
		0006
1051839-04	SPACER-BLAST SHIELD	0003
		0002
1051845-01	PLUG, INSUL, THERMAL	0001
1051864-01	PLATE	0001
1051864-02	STRAP SYS TUNNEL	
1051864-03	STRAP SYS TUNNEL	
1051864-04	STRAP SYS TUNNEL	
1051864-05	STRAP SYS TUNNEL	
1051873-01	WIRING HARNESS	0001
1051873-06	WIRING HARNESS	0009
		0008
		0007
		0006
		0005
		0004
		0003
1051882-01	IGNITER LOADED	0004
		0003
		0002
		0001

AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1051882-02	CHAMBER, LINED	
1051894-01	DISC, SEAL IGNTER SRM	
1051899-04	RETAINER, PIN	
1051915-01	CRTRDGE SEALANT ADH	0001
1051915-03	CRTRDGE SEALANT ADH	0002
1051915-04	CRTRDGE SEALANT ADH	0002
1051916-01	CARTRIDGE ASSY	0006
1051916-03	CARTRIDGE & SEALANT	0006
1051916-04	CARTRIDGE & SEALANT	0008
		0007
		0006
1051917-01	NOZ, SLNT/ADHESIVE	0002
1051917-02	NOZ, DUCKBILL	0001
1051917-03	NOZZLE, SEALANT/ADHE	0003
1051925-01	R00 GASKET MODIFIED S/A	0004
		0003
		0002
		0001
1051925-01	U02 GASKET MODIFIED S/A	0004
		0003
		0002
		0001
1051926-01	R00 GASKET, INNER	0004
		0002



AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCH
1051927-01	GASKET-OUTER	0001
		0004
		0003
		0002
		0001
1051927-01	R00 GASKET-OUTER	0004
		0003
		0002
		0001
1051937-01	SHIM, CMPLNCE RING	
1051945-01	THERMOCOUPLE ASSY	0001
1051964-01	CAP, PROTECTIVE	
1052165-01	PLUG	
1052180-01	NOZZLE ASSY FINAL	0006
		0005
		0004
		0003
		0002
		0001
1052180-01(903)	FWD EXIT CONE ASSY S	
1052181-01	NOSE-HSG ASSY, NOZZLE	0003
		0002
		0001
1052182-01	NOZZLE-BRG-COWL ASY	0002

## AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
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1U52183-01	NOSE-THROT-BRNG ASSY	0003 0002 0001
1U52184-01	NOSE-THROAT, NOZZLE	0003 0002 0001
1U52185-01	THROAT-INLET ASSY	0005 0003 0002 0001
1U52185-02	THROAT RING	0002 0001
1U52185-03	INLET RING	0002 0001
1U52188-01	EXIT CONE NOZZLE,AFT	0009 0008 0007 0005 0001 0007 0005
1U52188-02	LINER	0007 0005
1U52188-03	METAL ASSY	0009 0008 0004 0002

AS-BUILT PART LIST SRM-15 11/17/89

## SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1052189-01	EXT CONE SUBASSY, AFT	0009
		0008
		0007
		0005
1052189-01(901)	EXT CONE SUBASSY, AFT	
1052196-01	CAP, PROTECTIVE	
1052242-01	RING, COMPLNCE, NOZZLE	0001
1052242-01	R01 RING, COMPLNCE, NOZZLE	0003
		0002
		0001
1052288-04	FERRULE, CRIMP	0001
1052290-02	CABLE, NOZ SEVERANCE	0012
		0011
		0010
1052290-04	CABLE, NOZ SEVERANCE	0102
		0014
		0013
		0012
		0011
		0010
1052293-01	BARRIER-BOOSTER	0003
		0002
		0001
1052293-01	R01 BARRIER-BOOSTER	0003

AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
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1052294-01	BARRIER BOOSTER ASSY	0006 0005 0003 0002 0001
1052295-01	S/A DEVICE	0003 0002 0001
1052296-01	PACKING, PREFORMED	
1052302-01	BLAST SHIELD	
1052305-01	TUBE-ORDNANCE CABLE	0001
1052306-01	RING SEGMENT	0003 0002 0003 0002 0003 0002 0004 0003 0002
1052306-02	RING SEGMENT	0003 0002 0003 0002 0003 0002 0004 0003 0002
1052306-04	RING SEGMENT	0003 0002 0004 0003 0002
1052306-06	RING SEG NOZZLE	0004 0003 0002 0004 0003 0002 0004 0003 0002
1052306-07	RING SEG NOZZLE	0004 0003 0002 0004 0003 0002 0004 0003 0002
1052306-08	RING SEG NOZZLE	0004 0003 0002 0004 0003 0002 0004 0003 0002

AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1052307-02	CLAMP, INITIATOR	0001
1052308-01	NUT	0002
1052336-01	CLAMP, CABLE	
1052337-01	CLAMP, CABLE	
1052340-01	CABLE, MESSENGER	
1052341-06	SEVERANCE CABLE	0006
1052342-01	BRACKET, CABLE	
1052342-02	BRACKET, CABLE	
1052353-01	PROTECTIVE COVER	0002
1052354-02	BRACKET, CABLE	0001
1052356-01	CABLE GUIDE	0003
1052371-01	ADAPTER ASSY	
1052372-01	ADAPTER ASSY	0001
1052372-02	ADAPTER REDUCER	0001
1052449-03	PLUG, PROTECT, NOZZLE	0002
		0001
1052474-01	SEAL, SPLICE	
1052501-01	STIFFENER RING, INSUL	0003
		0002
		0001
1052501-02	STIFFENER RING, INSUL	0003
		0002

AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
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1052501-03	STIFFENER RING, INSUL	0003 0002 0001
1052501-03(901)	STIFFENER RING INSULA	
1052502-03	STIFFENER RING	
1052502-03	R01 STIFFENER RING	0003 0002 0001
1052502-04	STIFFENER RING	
1052502-04	R01 STIFFENER RING	0003 0002 0001
1052502-04	R02 STIFFENER RING	0002 0001
1052502-04	R03 STIFFENER RING	0003 0002 0001
1052502-05	R01 STIFFENER RING	0002 0001
1052502-05	R02 STIFFENER RING	0002 0001
1052502-06	R01 STIFFENER RING	0002 0001

AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1052502-06	R02 STIFFENER RING	0002
		0001
1052503-01	R02 SPLICE PLATE	
1052503-02	R02 SPLICE PLATE	0004
1052503-03	R02 SPLICE PLATE	0001
1052503-03	R01 SPLICE PLATE	0001
1052503-03	R02 SPLICE PLATE	0001
1052503-04	R02 SPLICE PLATE	0001
1052504-01	R02 ADAPTER, STIFFENER RING	
1052504-01 (901)	ADAPTER PLATE FIRED	
1052504-02	R01 ADAPTER, STIFFENER RING	0001
1052505-01	R03 PLATE, STIFFENER	
1052505-02	R01 PLATE, STIFFENER	0002
		0001
1052505-02	R02 PLATE, STIFFENER	0002
		0001
1052506-01	SPLICE PLATE, PAINTED	0002
		0001
1052506-02	SPLICE PLATE, PAINTED	0002
		0001
1052507-01	ADAPTER, PAINTED	0002
		0001
1052508-01	PLATE, PAINTED	0002
		0001

AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1052510-01	BOLT, 12 POINT	
1052519-01	EXIT CONE KIT/INSTLL	0009
1052519-04	DRAWING	0009
1052519-05	EXIT CONE KIT/INSTLL	0009
1052532-01	PLATE, IDENTIFICATION	
1052534-02	NOZZLE ASSEMBLY	0001
1052554-01	FLOOR PLATE ASSY	0001
1052554-02	FLOOR PLATE ASSY	0001
1052554-03	FLOOR PLATE ASSY	
1052554-04	FLOOR PLATE ASSY	
1052554-05	FLOOR PLATE ASSY	
1052554-06	FLOOR PLATE ASSY	
1052554-07	FLOOR PLATE ASSY	0001
1052554-08	FLOOR PLATE ASSY	
1052554-09	FLOOR PLATE ASSY	
1052557-01	PACKING, LUBRICATED	0002
		0001
1052557-03	PACKING, LUBRICATED	0002
		0001
1052557-07	PACKING, LUBRICATED	0001
1052557-08	PACKING, LUBRICATED	0001
1052557-10	PACKING, LUBRICATED	0002
		0001
1052569-01	SPLICE PLATE ASSY	0003



AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
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1052569-02	SPLICE PLATE ASSY	0002 0001 0002 0001
1052569-03	SPLICE PLATE ASSY	0001
1052570-01	FIELD&SKT JNT INSTAL	0002
1052570-02	FIELD&SKT JNT INSTAL	0002
1052570-03	FIELD&SKT JNT INSTAL	0002
1052570-04	FIELD&SKT JNT INSTAL	0002
1052570-05	FIELD&SKT JNT INSTAL	0002
1052570-06	STRAPPING KIT	0002
1052570-07	DRAWING	0001
1052571-01	FIELD SPLICE PLT KIT	0001
1052571-02	DRAWING	0001
1052572-01	FIELD SPLICE PLT KIT	0001
1052572-02	DRAWING	0001
1052573-01	INSUL STIFFNR RING	0003 0002
1052573-02	INSUL STIFFNR RING	0003 0002
1052573-04	DRAWING	0003 0002
1052622-01	EXIT CORE ASSY,AFT	0002

AS-BUILT PART LIST SRM-15 11/17/89

SORTED BY PART NUMBER

DOCUMENT	TITLE	ECO SCN
1052641-01	RETAINER	
8050879-01	SHIPPING CONTAINER	0005 0004 0003 0002
8051965-01	CONTAINER, SHP&STRAGE	0004
8051965-02	CONTAINER, SHP&STRAGE	0005 0004
8051965-03	CONTAINER, SHP&STRAGE	0005 0004
8052297-01	CAP ASSY-FARADAY	

APPENDIX A

SUMMARY OF CONTRACT MODIFICATIONS  
TO S/A 610 SCHEDULE B, WORK BREAKDOWN  
STRUCTURE HN

This appendix consists of brief abstracts of modifications to NASA contract NAS8-30490, Schedule B. The document was prepared to assist in locating and tracking specific changes and identifying modifications authorizing contract actions.

Where a modification (change order, supplemental agreement, letter amendment) is affected by a subsequent change, the modification implementing the change is listed in the right-hand column together with a code identifying the nature of the subsequent change as follows:

- A - Approval of ECP or PCP associated with the modification
- C - Modification cancelled
- D - Modification definitized, settlement of claims
- M - Modification amended (modified)
- S - Modification superseded

Summary of Contract Modifications to S/A 610 Schedule B,  
Work Breakdown Structure HN

<u>MOD No.</u>		<u>Description of Change</u>	<u>Superseded/ modified by:</u>	
S/A 610	I	DDT&E designated as Schedule A; Increment II production designated as Schedule B, with effort as definitized in attach.	S/A 670	M
	II	Deletion of Par 5, Schedule A, Article II, SOW		
	III	Schedule A contract amount, costs, and fees adjusted		
	IV	Approval of the following:		
		A. ECP SRM 0722, R1 and R2 (L/A 445) effectivity STS-7 only PCIN 57598		
		B. ECP SRM 0650, R4 (ref C/O 408 and S/A 505) with changes; effectivity STS-8, DM-5, QM-4, PCIN 57839.		
C/O 618		Increase in termination liability		
C/O 619		Mod 2 to L/A 589, increase in termination liability		
C/O 620		Direction to modify systems tunnel splice plate installation, ECR SA42-0092, PCIN 67334 (ECP SRM 0954) STS-11 and subs	S/A 683 S/A 756	D D
C/O 621		Increase in termination liability		
C/O 623	I	C/O 615, mod 41 to L/A 445 superseded	S/A 680	D
	II	Direction to accomplish X-ray inspection of STS-2713 and STW7-3179, PCIN 77933 (ECP SRM 0924)		
C/O 624		Direction to implement ECP SRM 0650R5, with changes, effectivity STS-8 and subs, DM-5, QM-4, PCIN 57893 (Ref mods 408, 505)	S/A 691 S/A 751	D D
C/O 625		Support hardware release notice No. 16 (PCP SRM 0081)	S/A 646	D
S/A 628	I	Contract costs and fees adjusted		
	II	C/O 537 modified to delete 20 psi transducer, PCIN 20768		
	III	Approval of the following:		
		A. ECP SRM 0846 and R1 (C/O 547), PCIN 77160		
		B. ECP SRM 0862R1 (C/O 546), PCIN 67374		

Summary of Contract Modifications to S/A 610 Schedule B,  
Work Breakdown Structure HN (Cont)

<u>MOD No.</u>	<u>Description of Change</u>	<u>Superseded/ modified by:</u>
IV	Settlement of C/O 581 (Mod 23 to L/A 445) at no adjustment in costs or fees	
V	Approval of the following (no adjustment in costs or fees):	
	A. ECP SRM 0650, R2 and R3 (ref C/O 408 and S/A 505), PCIN 57893	
	B. ECP SRM 0742, R1 and R3 (ref C/O 473), PCIN 57834	
	C. ECP SRM 0829, PCIN 67595	
VI	Settlement of C/Os 537 (ECP SRM 0845), 546, and 547	
S/A 629	I Contract amount, costs, and fees adjusted	
	II Settlement of C/O 586 (Mod 27 to L/A 445), acquisition of additional stiffener ring parts	
C/O 631	Direction to design and fabricate a nozzle exit cone cover to meet flight readiness firing environment, effectivity, STS-9, -12, -26 (ECP SRM 0969)	S/A 682 D S/A 691 D
C/O 633	Increase in termination liability	
C/O 634	Authorization to acquire long lead tooling for facility rearrangement of casting pits (PCP SRM 0083)	
C/O 635	Direction to implement ECP SRM 0970 with changes as stipulated, removal of alignment pins	S/A 646 D
S/A 637	I Implementation of C/O 580 (Mod 22 to L/A 445) and C/O 607 (Mod 36 to L/A 445) with no adjustment in costs or fees	S/A 751 M
	II Surcharge for AP procured from PE	
	III No adjustment in costs or fees Schedule B	
C/O 641	Direction to implement CCBP SB3-00-8449, zinc chromate application, installation instructions, PCIN 77999 (ECP SRM 0998)	S/A 673 A D

REVISION \_\_\_\_\_

DOC NO.	TWR-50181	VOL
SEC	PAGE	A-3

Summary of Contract Modifications to S/A 610 Schedule B,  
Work Breakdown Structure HN (Cont)

<u>MOD No.</u>	<u>Description of Change</u>	<u>Superseded/ modified by:</u>
C/O 644	Direction to modify zinc chromate putty configuration, STS-10 nozzles and subs (ECP SRM 1005)	S/A 755 D
S/A 646	Direction to accomplish requirements of C/Os 608, 625, and 635 at no adjustment in costs or fees	
S/A 647		
	I Contract amount, costs, and fees adjusted	
	II Settlement of the following:	
	A. C/O 584, Mod 25 to L/A 445	
	B. C/O 602, Mod 34 to L/A 445	
	C. C/O 613, Mod 40 to L/A 445	
S/A 651		
	I Contract amount, costs, and fees adjusted	
	II, Approval of ECP SRM 0873, R1, R2 and R3	
	III (C/O 563), PCIN 67784, and ECP SRM 0940, use of 4340 steel in place of D6AC for QS FWC metal parts. Settlement of C/O 563 and AP44 letters 423-82, 482-82, 505-82, 04-83, and AP46-280-83	
C/O 653	Increase in termination liability	
C/O 654	Mod 3 to L/A 589, increase in termination liability	
C/O 655	Direction to acquire/manufacture a Master Transfer Gage (PCP SRM 0087)	S/A 755 D
C/O 657	Direction to revise case delivery schedule to a delivery rate of 3 per month beginning April 84 (slow down)	C/O 725 C
C/O 659	Funding increased by \$3.251 M	
C/O 660	Mod 4 to L/A 589, increase in termination liability	
C/O 662	Increase in termination liability	
C/O 664	Mod 5 to L/A 589, direction to include attached SOW for the manufacture and delivery of SRMs for flights STS-16 through STS-36 and V1 through V2	

Summary of Contract Modifications to S/A 610 Schedule B,  
Work Breakdown Structure HN (Cont)

<u>MOD No.</u>		<u>Description of Change</u>	<u>Superseded/ modified by:</u>	
C/O 666		Direction to implement CCBBD SB3-00-8423, a modification to JSC 07700 Rev B, integrated logistics requirements		
C/O 667		Increase in termination liability		
C/O 669		With cancellation of STS-10 and use of STS-10 SRM hardware on STS-11, contractor is directed to identify SRM hardware sequentially without regard to flight designations, effectivity STS-11 and subs, PCIN 23231	S/A 711	D
C/O 671	I, II	Direction to establish a Primary Material Review Board and automated MRB tracking system, PCIN 00705	S/A 711	D
C/O 672	I, II	Mod 6 to L/A 589, direction to establish a Primary Material Review Board and automated tracking system, PCIN 00705 (PCP SRM 0090)	S/A 804	D
S/A 673				
	I, IV	Approval of ECP SRM 0998, zinc chromate application (C/O 641), with changes as stipulated, with no adjustment in costs or fees, PCIN 77999, AP46 letters 23-83, 26-83, and 28-83 settled.		
	II	Development Center Liaison Function (SPC contract) added	S/A 751	M
	III	Exhibit A, Attachment D, changes to data requirements listing to conform to DPD 400 Rev C, which has been approved.		
C/O 675		Increase in termination liability		
C/O 676		Mod 7 to L/A 589, increase in termination liability		
C/O 678		Mod 8 to L/A 589, increase in termination liability (?)		
S/A 682	I, II	Settlement of C/O 631. Contract amount, costs and fees adjusted (ECP SRM 0969)		
S/A 683	I, II	Settlement of C/O 620. Contract amount, costs, and fees adjusted (ECP SRM 0954)	S/A 756	M
C/O 685	I	Mod 9 to L/A 589. Revision of hardware availability dates and shipment schedule (PCP SRM 0077). Replaces delivery schedule outlined in C/O 664 (Mod 5 to L/A 589)		
S/A 688	I	Revised Para B, Article B4, Fee Payments. (ref S/A 610)		

REVISION \_\_\_\_\_

DOC NO. TWR-50181 | VOL  
SEC | PAGE

A-5

Summary of Contract Modifications to S/A 610 Schedule B,  
Work Breakdown Structure HN (Cont)

<u>MOD No.</u>	<u>Description of Change</u>	<u>Superseded/ modified by:</u>
C/O 690	Contract amount, costs, and fees adjusted in recognition of prospective cost underrun	
S/A 691		
	I Direction to furnish 48 ea. performed packing as spares	
	II Approval of ECP SRM 0650 R9 (C/O 624) and ECP SRM 0969 R1 (C/O 631)	
	III Changes to Article B15, Key Personnel	
C/O 693	Cancellation of STS-12 and transfer SRM hardware to STS-13	S/A 711 D
C/O 694	Mod 10 to L/A 589. Extend Art. 5 date to 2 Mar 84	
C/O 695	Mod 11 to L/A 589. Direction to ship 6 inert SRM segments to Vandenberg AFB	S/A 777 D
C/O 696	Direction to provide weekly schedules. Modify DPD 400 DR 1-3 as required. Increase scope of data reported	S/A 751 D
C/O 697	Mod 12 to L/A 589. Direction to provide weekly schedules. Modify DPD 400 DR 1-3 as required. Increase scope of data reported	
C/O 699	Mod 13 to L/A 589. Increase in termination liability	
C/O 702	Mod 14 to L/A 589. Increase in termination liability	
C/O 703	I, II, III Mod 15 to L/A 589. Direction to implement Critical Process Controls as follows: A. Revise TWR-10150 as directed B. Provide critical process specifications per attached DR 4-25 (PCP SRM 0097)	S/A 813 D C/O 854 C
S/A 705	I, II Approval of ECP SRM 0946 R1 (C/O 616), Contract amount, costs, and fees adjusted III Settlement of C/O 616	
C/O 708	Direction to inspect reused aft exit cone aluminum components (ECP SRM 1108)	S/A 851 D
C/O 709	Increase in termination liability	

REVISION \_\_\_\_\_

DOC NO.	TWR-50181	VOL
SEC	PAGE	



Summary of Contract Modifications to S/A 610 Schedule B,  
Work Breakdown Structure HN (Cont)

<u>MOD No.</u>		<u>Description of Change</u>	<u>Superseded/ modified by:</u>
S/A 711		C/Os 669, 671, and 693 definitized at no cost	
C/O 715		Increase in termination liability	
C/O 718	I	Increase in provisional fee due to cost underrun	
C/O 722		Increase Incr. II funding by \$400,000	
C/O 725		C/O 657 (reduction of case delivery schedule to 3 per month) cancelled	S/A 725 D
S/A 728	I	C/O 657 and C/O 725 definitized without adjustment of costs	
S/A 730		SRM CEI Specifications identified as follows:	
		CPW1-3200 STS-7	
		CPW1-3300 HPM with lightweight steel case	
		CPW1-3300 Add A HPM with standard steel case	
		CPW1-3300 Add B HPM with midweight steel case	
C/O 731		Increase in termination liability	
C/O 732		Mod 18 to L/A 589.	
	I	C/O 715 designated Mod 16 to L/A 589, C/O 722 as Mod 17 to L/A 589	
	II	Increase in termination liability	
C/O 740		Increase in termination liability	
S/A 747	I	C/O 666 definitized without adjustment in costs	
	II	JSC-07700, Vol IX, Rev A, Chge 15-22 to be included in TWR-13880 rather than CPW1-3300	
C/O 750		STS-15 cancelled; hardware transferred to STS-16	S/A 779 D
S/A 751			
	1.	Development Center Liaison Function (C/O 673) modified	
	2.	Direction to implement ECP SRM 0925R3 (ref C/O 607 and S/A 637)	

REVISION \_\_\_\_\_

DOC NO.	TWR-50181	VOL
SEC	PAGE	

Summary of Contract Modifications to S/A 610 Schedule B,  
Work Breakdown Structure HN (Cont)

<u>MOD No.</u>	<u>Description of Change</u>	<u>Superseded/ modified by:</u>
3.	Direction to implement ECP SRM 0650 R6 (ref C/O 624)	
4.	Change in Key Personnel	
5.	Settlement of C/O 624 and C/O 696 at no adjustment in costs	
S/A 755		
I	Modification of SOW, Para 4, "Acquisition and Sustenance of Tooling..."	
II	Contract costs and fees adjusted	S/A 795 M
III	Settlement of C/O 595, C/O 612 (PCP SRM 0078), C/O 634 (PCP 0083), C/O 644 (ECP SRM 1005), and C/O 655 (PCP SRM 0087)	
S/A 756		
I	Approval of ECP SRM 0954 R1 (C/O 620)	
II	Settlement of C/O 620 and modification of S/A 683 at no change in contract amount, costs, or fees	
S/A 779		
I	Settlement of C/O 750, cancellation of STS-15 and transfer of hardware to STS-16, with no adjustment of costs or fees	
C/O 782	Increase in termination liability	
S/A 795	Modification of Costs, Fees, and Payments	S/A 851 M
C/O 796	Increase in termination liability	
S/A 798	Indemnification agreement for Space Activities, Unusually Hazardous Risks	
C/O 806 21 Feb 85	Increase to termination liability	
C/O 818 22 Apr 85	Increase in termination liability	
C/O 832 15 Jul 85	Increase in termination liability	
C/O 834 09 Aug 85	Direction to implement objectives described in QM-5 Nozzle Instrumentation Plan	C/O 861 C S

REVISION \_\_\_\_\_

DOC NO. TWR-50181 | VOL  
SEC | PAGE

Summary of Contract Modifications to S/A 610 Schedule B,  
Work Breakdown Structure HN (Cont)

Superseded/  
modified by:

<u>MOD No.</u>	<u>Description of Change</u>
C/O 841 21 Aug 85	Increase in termination liability
C/O 850 23 Sep 85	Increase in termination liability
C/O 852 09 Oct 85	Increase in termination liability
C/O 861 08 Nov 85	Cancels and supersedes C/O 834. Direction to implement attached QM-5 Nozzle Instrumentation Plan
C/O 884 27 Feb 86	Increase in termination liability
S/A 905 17 Oct 86	Schedule D
I, II, III IV VI	Contract amount, costs, and fees adjusted
V	Article D-30, Benefit Pension Plan modified
VII	Settlement of PCP SRM 0120, PCP SRM 0121, and PCP SRM 0122
S/A 905	Definitize Claims on Casting Pit Fire - PCP's 0120, 0121 and 0122  D/B 10-27-86 10-17-86
LETTER	Complete "Baseline" Sch B effort with SOR; Defer all other effort to FY89  PCO Letter AP46C-042-88 dated 2/4/88
S/A 994	Adjust Contract Cost and Fees <\$162,714> to \$409,249,899  5-31-88  5-20-88

REVISION \_\_\_\_\_

DOC NO.	TWR-50181	VOL
SEC	PAGE	

A-9

Appendix B

CONTRACTOR'S INFORMATION ACCESSIONING LIST  
FOR SPACE SHUTTLE SOLID ROCKET MOTOR PROJECT

This appendix is divided into individually page-numbered parts. Within each part, documents are arranged by DR. DRs, and documents related to DRs, are arranged in ascending alphanumerical order.

REVISION \_\_\_\_\_

DOC NO.	TWR-50181	VOL
SEC	PAGE	B-1

## CONTENTS

<u>Section/Parts</u>	<u>Page</u>
1	INTRODUCTION .....
	1.1 SCOPE .....
	1.2 INFORMATION TYPE CATEGORIES .....
Part 1	Plans and Reports (TWR- series publications, serial numbers 10000 through 13999) .....
	1. Management (DRs 1-1 through 1-18) .....
	2. Configuration Management (DRs 2-1 and 2-9) .....
	3. Engineering and Production (DRs 3-2 through 3-24, except DR 3-8) .....
	4. Quality, Reliability, and Safety (DRs 4-1 through 4-15) .....
	5. Test Management (DRs 5-2 through 5-6) .....
	6. Operations (DRs 6-1 and 6-3) .....
	7. Logistics (DRs 7-1 through 7-10) .....
Part 2	Operation and Maintenance Documents (DR 3-8) .....
Part 3	Photographs and Motion Picture Film Clips (DR 1-13) .....
	1. Still Photographs .....
	2. Motion Picture Film Clips .....

## DPD 400 ACRONYMS

DR	data requirement
DPD	data requirement document
ETP	engineering test plan
IRD	information requirements document
TWA	Thiokol Wasatch Analysis
TWR	Thiokol Wasatch Report
WBS	work breakdown structure
WTP	Wasatch test plan

## APPENDIX B INTRODUCTION

### 1.1 SCOPE

This appendix/in part was prepared and submitted in accordance with DR 1-7 of IRD DPD 400 to Contract NAS8-30490. It contains listings of current issues of all Type 1, 2, and 3 documents prepared and released by the contractor, during the Buy 1 contract. For your convenience/reference we have included document listings starting with the Buy 1 contract (Schedule A) through the first quarter of 1989, which incorporates a large percentage of Buy 2 (Schedule D). The document listings were included because of the time period overlap between contracts. The types of information covered by DPD-400 are categorized into three types as follows:

### 1.2 INFORMATION TYPE CATEGORIES

Type 1 documentation requires formal NASA approval prior to implementation. It will be considered controlled documentation, and any deviations/changes to the documentation will be processed through proper channels for NASA approval prior to implementation.

NOTE: Certain tests plans are identified as Type 1a documents. A Type 1a test plan is submitted to NASA for review and approval, but unless NASA directs otherwise testing will proceed on schedule whether or not the test plan has been approved. The only documents identified as Type 1a in Rev C are test plans for technical evaluation motors (TEM).

Type 2 documentation consists of information items submitted to NASA for information and does not require formal approval. Documents describing plans or actions the contractor intends to implement will be submitted not later than three weeks prior to the planned implementation date. Such documentation will be considered approved unless the contractor has been notified otherwise prior to implementation.

Type 3 documentation is contractually required by DPD 400, but is deliverable only upon specific NASA request.

Part 1

Plans and Reports (TWR-series publications,  
serial numbers 10000 through 13999)

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
1-1	1.4.2.1	TWR-10191 Rev A	Management Plan	01-17-75	1	U
1-10	1.4.2.1.4	TWR-10195 Rev V	Requirements -Government Furnished	05-01-87	2	U
1-12	1.4.2.1.3	TWR-10185	New Technology Plan	08-29-74	1	U
1-12		TWR-18341	New Technology Plan for NASA Contract NAS8-30490, Space Shuttle Solid Rocket Motor Project	04/15/88	1	U
1-13	1.4.2.1.3	TWR-10667 Rev A	Documentary Photography Requirements for Space Shuttle Project	10-21-86	1	U
1-15	1.4.2.1.5	TWR-10194 Rev B	Procurement Management Plan for Space Shuttle Solid Rocket Motor Project	06/06/88	1	U
1-18	HN101-03-10	DPD 400 Rev C	Space Shuttle Program Solid Rocket Motor Project Information Requirements Document	05-20-83	1	U
1-18		DPD 400 Rev C DCN 1	Space Shuttle Program Solid Rocket Motor Project Information Requirements Document, DRs 3-2 and 3-3 modified, DR 3-4 deleted	12-01-83	1	U
1-18		DPD 400 Rev C DCN 10	Space Shuttle Program Solid Rocket Motor Project Information Requirements Document, DR 4-26 added	06-16-86	1	U
1-18		DPD 400 Rev C DCN 11	Space Shuttle Program Solid Rocket Motor Project Information Requirements Document, DR 4-27 added	01-30-87	1	U
1-18		DPD 400 Rev C DCN 12	Space Shuttle Program Solid Rocket Motor Project Information Requirements Document, DRs 3-21, 3-23, 3-25, 3-31, and 3-32 added	02-18-87	1	U
1-18		DPD 400 Rev C DCN 15R1	Space Shuttle Program Solid Rocket Motor Project Information Requirements Document, DRs 5-2, 5-3, and 5-6 modified	03-30-87	1	U
1-18		DPD 400 Rev C DCN 17	Space Shuttle Program Solid Rocket Motor Project Information Requirements Document, DR 3-15 added	02-18-87	1	U
1-18		DPD 400 Rev C DCN 2	Space Shuttle Program Solid Rocket Motor Project Information Requirements Document, DR 1-3 modified	06-25-86	1	U
1-18		DPD 400 Rev C DCN 22	Space Shuttle Program Solid Rocket Motor Project Information Requirements Document, DR 5-2 modified	08-26-87	1	U
1-18		DPD 400 Rev C DCN 3R2	Space Shuttle Program Solid Rocket Motor Project Information Requirements Document, DR 4-20 modified	01-14-86	1	U
1-18		DPD 400 Rev C DCN 4	Space Shuttle Program Solid Rocket Motor Project Information Requirements Document, DR 4-23 added	08-20-84	1	U
1-18		DPD 400 Rev C DCN 5R2	Space Shuttle Program Solid Rocket Motor Project Information	04-15-84	1	U



PART 1

DR NO. ==	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
1-18		DPD 400 Rev C DCN 6	Space Shuttle Program Solid Rocket Motor Project Information Requirements Document, DR 3-2 modified	08-28-85	1	U
1-18		DPD 400 Rev C DCN 7	Space Shuttle Program Solid Rocket Motor Project Information Requirements Document, DR 4-25 added	02-18-87	1	U
1-18		DPD 400 Rev C DCN 8	Space Shuttle Program Solid Rocket Motor Project Information Requirements Document, DR 4-12 modified	02-07-84	1	U
1-18		DPD 400 Rev C DCN 9	Space Shuttle Program Solid Rocket Motor Project Information Requirements Document, Cover page and DR 4-3 modified	04-21-86	1	U
1-2	1.4.2.1	TWR-10517	Expanded Work Breakdown Structure and Dictionary	05-29-75	1	U
1-7	1.4.2.1.3	TWR-10230-78	Information Accessioning List	02-10-83	2	U
1-7	1.1.1.2.3	TWR-13878-17	Information Accessioning List	Mar 89	2	U
2	1.4.2.3.8	TWR-10405	Certification by Similarity Report for Space Shuttle OFI and DFI Pressure Transducers	03/12/78	2	U
2-1	1.4.2.1.2	TWR-10150 Rev H	Configuration Management Plan for Space Shuttle Solid Rocket Motor Project	May 1989	1	U
2-9	1.4.2.1.2	TWA-1131	Installation of Pin Retainer Band on Aft Skirt/ Aft Segment Joint	10-23-83	2	U
2-9	1.4.2.1.2	TWA-1133	Installation of Pin Retainer Band on SRM Aft Center Segment Factory Joint	11-29-80	2	U
2-9	1.4.2.1.2	TWA-1135	Installation of Pin Retainer Band on SRM Case Joints	11-20-79	2	U
2-9	1.4.2.1.2	TWA-1136	TCTI Insulating Pin Retainer Bands on SRM Case Joints	01-25-80	2	U
2-9	1.4.2.1.2	TWA-1137	TCTI Removal and Replacement of Pin Retainer Clips SRM Aft Center Segment Factory Joint	11-21-79	2	U
2-9	1.4.2.1.2	TWA-1140	Installing Flight Labels on SRB STS-1	04-18-80	2	U
2-9	1.4.2.1.2	TWA-1148 Rev B	Development Flight Instrumentation Modification, STS-1A and 1B	09-18-80	2	U
2-9	1.4.2.1.2	TWA-1149 Rev B	SRM Ignition System Seals Leak Test	09-24-80	2	U
2-9	1.4.2.1.1	TWA-1150	STW7-2941 Specification Deviation for Adhesive Specimen Curing	03-21-80	2	U
2-9	1.4.2.1.2	TWA-1152	Lubricate and Modify Torque Values for ARM Stiffener Ring Mounting Bolts	03-24-80	2	U
2-9	1.4.2.1.2	TWA-1153	Remove STS-1 Igniter from Forward Segment at KSC	06-23-80	2	U
2-9	1.4.2.1.2	TWA-1154	Fitting SRM Stiffener Ring Splice Seals	03-25-80	2	U
2-9	1.4.2.1.2	TWA-1155	Connector Replacement (J1 End of Cable 1U51562-01) SRM Right Hand	03-27-80	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
2-9	1.4.2.1.2	TWA-1160	Igniter Motional Pickup Pressure Transducer	09-05-80	2	U
2-9	1.4.2.1.2	TWA-1161 Rev A	DFI Transducer Island Installation	02-12-80	2	U
2-9	1.4.2.1.2	TWA-1162	Install Exterior Insulation and Additional Reinforcing Tape Over LSC Blast Shield	09-11-80	2	U
2-9	1.4.2.1.2	TWA-1164 Rev A	Install STS-1 Igniter Into Forward Segment at KSC	09-26-80	2	U
2-9	1.4.2.1.2	TWA-1165 Rev A	Inspection of STS-1 Forward Segment Propellant Grain for Defects at KSC	07-10-80	2	U
2-9	1.4.2.1.2	TWA-1166 Rev A	Propellant Inspection and Repair for SRMs, STS-1	07-08-80	2	U
2-9	1.4.2.1.2	TWA-1167	Safe and Arm Test Console Assembly Wiring Modification	08-05-80	2	U
2-9	1.4.2.1.2	TWA-1175 Rev A	Calorimeter Installation and DFI Cable Insulation on Exit Cone	07-27-81	2	U
2-9	1.4.2.1.2	TWA-1176 Rev B	Insulate DFI Instrumentation Cables, and Connectors on Aft Segment	09-02-81	2	U
2-9	1.4.2.6.1	TWA-1181	Cork Modification/Insulation Around DFI Islands on Left Hand Aft Segment (STS-3)	10-21-81	2	U
2-9	1.4.2.6.1	TWA-1182	Cork Modification/Insulation Around DFI Islands on Left Hand Forward Segment (STS-3)	11-12-81	2	U
2-9	1.4.2.6.1	TWA-1185	SRM Aft Exit Cone Severance Cable Rework STS-3	04-12-82	2	U
2-9	1.4.2.6.1	TWA-1190	Deletion of Plugs on SRM Safety and Arming Device Installation Kit STS-4 & 5	06-04-82	2	U
2-9	48102	TWA-1901 Rev B	National Aeronautics and Space Administration Space Shuttle Time Compliance Technical Instruction Igniter Resistive Thermal Device (RTD) Temperature Instrumentation Installation	05/26/88	2	U
2-9	48102	TWA-1902 Rev C	Installation and Leak Check Test of Field and Nozzle-to-Case Leak Check and Vent Port Plug	05-14-88	2	U
2-9	48102	TWA-1903	Transducer and Transducer Bolt Assembly Removal and Replacement	05-23-88	2	U
2-9	48102	TWA-1904	Replace Igniter Adapter Inner Bolt Circle Bolts	06-10-88	2	U
2-9	48102	TWA-1906 Rev A	National Aeronautics and Space Administration Space Shuttle Time Compliance Technical Instruction Installation and Leak Test of Field Joint Vent Port Plug	08/19/88	2	U
2-9	48102	TWA-1908	National Aeronautics and Space Administration Space Shuttle Time Compliance Technical Instruction Installation and Leak Test of Field Joint Vent Port Plug	10/14/88	2	U
2-9	48102	TWA-1909	National Aeronautics and Space Administration Space Shuttle Time Compliance Technical Instruction	10/14/88	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
2-9	48102	TWA-1911	National Aeronautics and Space Administration Space Shuttle Time Compliance Technical Instruction Installation of Field Joint Leak CheckPort Plug	10/17/88	2	U
2-9	1.4.2.1.2	TWA-706	Passive Temperature Indicator Mod Kit Installation on Exit Cone	08-11-82	2	U
2-9	1.4.2.1.2	TWA-710	Cork Insulation Painting Modification	08-19-82	2	U
2-9	1.4.2.1.2	TWA-716	Stiffener Ring Modification Kit Installation	09-10-82	2	U
2-9	1.4.2.1.2	TWA-717	Stiffener Ring Bolt Replacement Modification	09-10-82	2	U
2-9	1.4.2.1.2	TWA-718	Detonator - LSC Interface Modification Kit Installation	09-22-82	2	U
2-9	1.1.2.1.3	TWA-723	Install Nozzles on Aft Segment		2	U
2-9	1.1.1.1.2	TWA-732	Replacement of FRF Nozzle Cover	05-16-84	2	U
2-9	FN301	TWA-749	Temperature Instrumentation Installation/Removal	07-10-85	2	U
2-9	FN301	TWA-750	Modal Survey and Twang Test Instrumentation Installation/Removal	08-23-85	2	U
2-9	1.1.1.2	TWA-751 Rev A	Igniter Adapter Seals Pressure Test Flight Set X018 through S022 and F001	06-07-85	2	U
2-9	1.1.1.2	TWA-752 Rev A	Replace Igniter Adapter Gaskets at KSC	06-12-85	2	U
2-9	FN301	TWA-753	FWC Segment End to End Resistance Measurement at VLS F001	06-20-85	2	U
2-9	FN301	TWA-755	Modify Instrumentation Insulation Left Hand Forward Segment, Flight Set F001	07-01-85	2	U
2-9	FN301	TWA-758 Rev A	Pulse Echo Inspection for Delamination of Left Aft Segment, P/M 1U82300-01	11-01-85	2	U
2-9	FN301	TWA-760	Joint Free-Play Test and SSME Flight Readiness Firing (RFR) Instrumentation Installation/Removal	04-04-86	2	U
2-9	FN301	TWA-763	Pre and Post Flight Readiness Firing Pulse Echo Inspection of the Aft Segments	09-20-85	2	U
2-9	FN301	TWA-766	Preparation for SRM DFI Fairing Removal	10-25-85	2	U
2-9	FN301	TWA-767	Removal for FWC DFI Fairings	10-31-85	2	U
2-9	FN301	TWA-768	DFI Fairing Location Repair	11-18-85	2	U
2-9	FN301	TWA-769	Igniter Bolt Re-Torque SRM 248, 27B, and 28A & B	11-08-85	2	U
2-9	FN301	TWA-773	Preparation, Installation, and Closeout for Additional Internal Instrumentation on STA-28	01-30-86	2	U
3-	1.4.2.3.3	TWR-11458	SRM Aft Closure (SN-1) Analysis IRRs 310013 and 31650	06-29-77	3	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-11	1.4.2.3.3	TWR-10184 Rev A Supp 1	Fracture Control Plan for SRM Case (Preliminary)	11-05-80	1	U
3-11	1.4.2.3.5	TWR-10184 Rev A Supp 2	Fracture Control Plan for SRM Nozzle (Preliminary)	11-12-80	1	U
3-11	1.4.2.3.6	TWR-10184 Rev A Supp 3	Fracture Control Plan for SRM Ignition System (Preliminary)	12-01-80	1	U
3-11	1.4.2.3	TWR-10184 Rev C	Fracture Control Plan (Approved)	12-08-80	1	U
3-12	1.4.2.3.8	TWR-10275	Electromagnetic Interface Report	10-01-76	2	U
3-13	1.4.2.3	TWR-10192 Rev G	Material Selection and Control (Approved)	Sep 1989	1	U
3-14	1.4.2.3.1	TWR-10435	Stress Analysis Report for the Structural Elements of the SRM	03-18-75	2	U
3-14	1.4.2.3.3	TWR-11269 Vol I Rev B	Stress Analysis Report for the Structural Elements of the SRM Volume I Case and Igniter Hardware	12-01-80	2	U
3-14	1.4.2.3.3	TWR-11269 Vol II Rev B	Stress Analysis Report for the Structural Elements of the SRM Volume II SRM Nozzle Hardware	11-14-80	2	U
3-14	1.4.2.3.4	TWR-11269 Vol III	Stress Analysis Report for the Structural Elements of the SRM Volume Propellant	11-15-80	2	U
3-14	1.4.2.3	TWR-11269 Vol IV Rev B	Stress Analysis Report for the Structural Elements of the SRM Volume IV Miscellaneous Structural Elements	Nov 80	2	U
3-14	1.4.2.3.3	TWR-12968 Rev A	Space Shuttle High Performance Motor SRM Case Stress Analysis	04-01-81	2	U
3-14	1.4.2.3.3	TWR-13209	Hydroproof Report, Lightweight Attach and Stiffener Segments	11-05-81	2	U
3-14	1.4.2.3.10	TWR-13513	Structural Analysis of Redesigned Nozzle Plug	01-25-83	2	U
3-14	HQ301	TWR-16975 Rev B	RSRM Nozzle Stress Report	03/23/89	2	U
3-15	1.4.2.3.2	TWR-10212 Addend A Rev B	Development and Verification Plan for Space Shuttle Solid Rocket Motor Project High Performance Motor	Aug 84	1	U
3-15	FN301	TWR-10212 Addend B Rev A	Development and Verification Plan for Space Shuttle Solid Rocket Motor Project, Filament Wound Case	03-01-85	1	U
3-15	1.4.2.3.2	TWR-10212 Rev G	SRM Development and Verification Plan (Approved)	10-01-80	2	U
3-16	1.4.2.5.1	TWR-10341 Rev C	Manufacturing Plan	09-30-84	2	U
3-16	1.1.1.3	TWR-13477 Supp 1	Manufacturing Plan for Space Shuttle Solid Rocket Motor Project Supp 1: SRM Tooling Status/Requirements to TWR-10341	01-01-84	2	U
3-16	1.4.2.5.1	TWR-13477 Supp 1	SRM Tool Status Requirements, Supp 1 to TWR-10341	03-01-83	2	U
3-16	1.1.4.1	TWR-13477 Supp 2	SRM Tooling Status/Requirements Supp 2 to TWR-10341	01-01-84	2	U to
3-17	1.4.2.6.2	TWR-10156 Rev D	Facilities Utilization Plan	02-15-82	2	U
3-18	1.4.2.1.3	TWR-12442 Rev C	SRM Production Data Package	12-19-	1	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-2	1.4.2.3.2	TWR-10211-90	Mass Properties Report	03/05/89	2	U
3-24	1.4.2.3.6	TWR-11642	Minutes of the Space Shuttle SRM S&A Critical Design Review	11-03-77	2	U
3-26	1.4.2.1.2	TWR-12318	Final Minutes of SRM F&CI Meeting	02-11-80	2	U
3-26	1.4.2.1.2	TWR-12442	Minutes of the Space Shuttle SRM F&CI Meeting	08-16-79	2	U
3-26	1.4.2.1.2	TWR-12537	Minutes of the SRM F&CI Meeting No. 3	11-09-79	2	U
3-3	1.4.2.3.6	TWR-10283	SRM Ignition Transient Study	10-23-75	3	U
3-3	1.1.1.3.1	TWR-13742 Rev A	Mass Properties History Log, SRM-11, S/N 057	08-23-83	2	U
3-3	1.1.1.3.1	TWR-13803 Rev A	Mass Properties History Log, SRM-11A, S/N 059	03-07-84	2	U
3-3	1.1.1.3.1	TWR-13809	Mass Properties History Log, SRM-11B, S/N 060	03-07-84	2	U
3-3	1.1.1.3.1	TWR-13867	Mass Properties History Log, SRM-12A, S/N 061	04-04-84	2	U
3-3	1.1.1.3.1	TWR-13926	Mass Properties History Log, SRM-12A, S/N 063	02-29-84	2	U
3-3	1.1.1.3.1	TWR-13975	Mass Properties History Log, SRM-13B, S/N 064	03-01-84	2	U
3-3	1.1.1.3.1	TWR-14015	Mass Properties History Log, SRM-14A, S/N 065	04-26-84	2	U
3-3	FN201	TWR-14090	Mass Properties for Filament Wound Case Quarter Scale QS-1	11-30-83	2	U
3-3	1.1.1.3.1	TWR-14122	Mass Properties History Log, SRM-14B, S/N 066	04-26-84	2	U
3-3	1.1.1.2	TWR-14140	Mass Properties History Log, Space Shuttle DM-6 S/N 022	05-16-85	2	U
3-3	1.1.1.3.1	TWR-14176	Mass Properties History Log, SRM-15B, S/N 068	05-18-84	2	U
3-3	1.1.1.3.1	TWR-14258	Mass Properties History Log, SRM-15A, S/N 067	05-18-84	2	U
3-3	1.1.1.3.1	TWR-14320 Rev A	Mass Properties History Log, Space Shuttle SRM-16A S/N 069	02-04-85	2	U
3-3	1.1.1.3.1	TWR-14323 Rev A	Mass Properties History Log, Space Shuttle SRM-16B S/N 070	02-04-85	2	U
3-3	1.1.1.3.1	TWR-14331 Rev A	Mass Properties History Log, Space Shuttle SRM-17A S/N 071	02-04-85	2	U
3-3	1.1.1.3.1	TWR-14381 Rev A	Mass Properties History Log, Space Shuttle SRM-17B S/N 072	02-04-85	2	U
3-3	1.1.1.3.1	TWR-14420	Mass Properties History Log, Space Shuttle SRM-18A S/N 073	11-01-84	2	U
3-3	1.1.1.3.1	TWR-14421	Mass Properties History Log, Space Shuttle SRM-18B S/N 074	11-08-84	2	U
3-3	1.1.1.2	TWR-14572	Mass Properties History Log, Space Shuttle SRM-19B S/N 076	01-17-85	2	U
3-3	1.1.1.2	TWR-14606	Mass Properties History Log, Space Shuttle SRM 330L020A S/N 077	01-30-85	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-3	1.1.1.2	TWR-14607	Mass Properties History Log, Space Shuttle SRM 330L020B S/N 078	02-06-85	2	U
3-3	1.1.1.3.1	TWR-14608	Mass Properties for Filament Wound Case SRM Structural Test Article STA-2	09-26-84	2	U
3-3	FN301	TWR-14742	Mass Properties History Log, Space Shuttle DM-7 S/N 023	11-26-85	2	U
3-3	1.1.1.2	TWR-14747	Mass Properties History Log, Space Shuttle SRM0L021A S/N 079	07-08-85	2	U
3-3	1.1.1.2	TWR-14748	Mass Properties History Log for Space Shuttle SRM-L021B S/N 080	07-12-85	2	U
3-3	1.1.1.2	TWR-14800	Mass Properties History Log for Space Shuttle SRM L022A S/N 081		2	U
3-3	1.1.1.2	TWR-14801	Mass Properties History Log for Space Shuttle SRM L022B S/N 082		2	U
3-3	1.1.1.2	TWR-14811	Mass Properties History Log for Space Shuttle SRM L023A S/N 083	09-24-85	2	U
3-3	1.1.1.2	TWR-14812	Mass Properties History Log for Space Shuttle SRM L023B S/N 084	09-24-85	2	U
3-3	1.1.1.2	TWR-14915 Rev A	Mass Properties History Log, Space Shuttle SRM-F001A, S/N 601	11-14-85	2	U
3-3	1.1.1.2	TWR-14916 Rev B	Mass Properties History Log, Space Shuttle SRM-F001B S/N 602	08-01-85	2	U
3-3	1.1.1.2	TWR-15062	Mass Properties History Log for Space Shuttle SRM L024A S/N 085	10-01-85	2	U
3-3	1.1.1.2	TWR-15369	SRM Mass Properties STS-61B/SRM-L023 Flight Evaluation	12-06-85	2	U
3-3	HQ301	TWR-16634 Rev A	Mass Properties History Log, Space Shuttle DM-8	11-20-87	2	U
3-3	HQ301	TWR-16985 Rev A	Mass Properties History Log, Space Shuttle DM-9	03-31-88	2	U
3-3	1.4.2.3.2	TWR-17144	Mass Properties History Log Space Shuttle QM-6	07/27/88	2	U
3-3	1.4.2.3.2	TWR-17329	Mass Properties History Log Space Shuttle PVM-1	10/04/88	2	U
3-3	4B102	TWR-17335	Mass Properties History Log for Space Shuttle 360L001-RH	03-15-88	2	U
3-3	1.4.2.3.2	TWR-17336	Mass Properties History Log Space Shuttle 360L002-LH	07/29/88	2	U
3-3	1.4.2.3.2	TWR-17337	Mass Properties History Log Space Shuttle 360L002-RH	07/27/88	2	U
3-3	1.4.2.3.2	TWR-17338	Mass Properties History Log Space Shuttle 360L003-RH	10/25/88	2	U
3-3	1.4.2.3.2	TWR-17339	Mass Properties History Log Space Shuttle 360L003-RH	10/25/88	2	U
3-5	HQ301	ETP-0364	Helical Coil Insert Study	08/03/88	3	U
3-5	1.4.2.4.1	TWR-10335	Trade Study Report SRM Segment Breakover Methods	01-27-75	3	U
3-5	1.4.2.3.6	TWR-10391	SRM Ignition System Test Report of Core Pop Verification Program	05-12-75	3	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5	1.4.2.4.1	TWR-10399	Trade Study Report - Segment Joint Leakage Test Unit Configuration	04-09-75	3	U
3-5	1.4.2.3.6	TWR-10418	Grain Structural Analysis of SRM Igniter for Space Shuttle SRM Project	11-06-77	3	U
3-5	1.4.2.4.1	TWR-10452	Trade Study Report - SRM Segment Shipping Protection	04-09-75	3	U
3-5	1.4.2.2.2	TWR-10462	Environmental Impact Statement for Space Shuttle SRM Project Manufacturing and Testing Operations at Wasatch Division	03-31-75	3	U
3-5	1.4.2.4.5	TWR-10510	SRM Support Equipment Engineering Analysis for Nozzle Closure, Internal Pressure - STA-1 Model Designator: C77-0374 and Cover Plate, Ignition Adapter - STA-1 Model Designator: C77-0378	02-09-75	3	U
3-5	1.4.2.3.4	TWR-10543	Space Shuttle SRM Propellant Dynamic Properties	06-25-75	3	U
3-5	1.4.2.3.6	TWR-10607	Space Shuttle SRM Ignition System Design Report Gask-O-Seal/Stat-O-Seal Application	08-01-75	3	U
3-5	1.4.2.3.2	TWR-10619	Thermal Analysis of SRM During KSC Operations, TD-39	08-13-75	3	U
3-5	1.4.2.3.6	TWR-10693	Justification for Elimination of SRM S&A TU-801 Hot Gas Exposure Test	10-31-75	3	U
3-5	1.4.2.3.3	TWR-10705	Evaluation of the Forging for the SRM Forward Case Segment P/N 1U50169	09-01-83	3	U
3-5	1.4.2.3.3	TWR-10771	SRM Clevis Joint Analysis	12-02-75	3	U
3-5	1.4.2.3.6	TWR-10783	Igniter Case Adapter Hydroproof Fixture Analyses	01-05-76	3	U
3-5	1.4.2.3.3	TWR-10784	SRM Attach Segment Analysis	11-24-75	3	U
3-5	1.4.2.3.3	TWR-10821	Space Shuttle SRM Case Water Impact Analysis, Sep 75 Loading	12-19-75	3	U
3-5	1.4.2.3.2	TWR-10822	A Two-Dimensional Thermal Analysis of the SRM Center Segment During Exposure to Summer Environment at ETR	12-19-75	3	U
3-5	1.4.2.3.6	TWR-10862	Igniter Hydroburst Assembly Analysis	01-29-76	3	U
3-5	1.4.2.3.2	TWR-10868	Special Aerodynamic Analysis of Problems Associated With the SRM Exhaust Gas Flow Field	01-01-76	3	U
3-5	1.4.2.3.3	TWR-10872	SE-019-057-2H Document Review	02-09-76	3	U
3-5	1.4.2.3.9	TWR-10904 Rev B	Material Selection for Evaluation for Strain Gage Installation of STA-1 Space Shuttle SRM	09-17-76	3	U
3-5	1.4.2.3.6	TWR-10905	Search for Data in Ignition of B-KNO3 Pellets by the NSI	03-01-76	3	U
3-5	1.4.2.4.3	TWR-10917 Rev B	SRM Support Equipment Engineering Analysis for Shipping Link, Throat Assembly, Rocket Motor Nozzle, P77-0313	11-15-79	3	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5	1.4.2.4.3	TWR-10932 Rev A	SRM Support Equipment Engineering Analysis for Protective Handling ring Assembly, Model Designator H77-0381	10-14-77	3	U
3-5	1.4.2.4.5	TWR-10940	SRM Support Equipment Engineering Analysis for Heavy Duty Railcar Chock Tie-Down Structure, Model Designator P77-0359, and Light Duty Transporter, Model Designator P77-0359	10-08-77	3	U
3-5	1.4.2.3.5	TWR-10956	Nozzle Alignment Procedure for Space Shuttle SRM	03-31-76	3	U
3-5	1.4.2.3.2	TWR-10971	Impact Assessment of Induced Ascent and Re-entry Heating Environment Imposed on Morton Thiokol by TD-44 and TD-50	04-23-76	3	U
3-5	1.4.2.3.7	TWR-10984	Final Report, Study of Potential for SRM Internal Insulation/Liner Reignition During Re-entry (TD-18)	Apr 1976	3	U
3-5	1.4.2.3.2	TWR-11048	Thermal Evaluation of an SRM Center Segment From Casting to Arrive at KSC During a Winter Environment	Apr 1976	3	U
3-5	1.4.2.3.2	TWR-11091 Rev A	Thermal Analysis of the SRM Center Segment From Casting to Arrival at KSC During a Summer Environment	04-01-76	3	U
3-5	1.4.2.3.2	TWR-11104	A Two-Dimensional Thermal Analysis of the SRM Center Segment During Exposure to a Winter Environment at ETR	01-12-76	3	U
3-5	1.4.2.4.1	TWR-11142	SRM Support Equipment Engineering Analysis for Handling Beam, Breakover - Vertical Rocket Motor S Designator H77-0384	01-11-78	3	U
3-5	1.4.2.4.5	TWR-11143 Rev C	SRM Support Equipment Engineering Analysis, Handling Beam, Breakover, Rocket Motor Segment, H77-0382	10-24-79	3	U
3-5	1.4.2.4.3	TWR-11147	SRM Support Equipment Engineering Analysis for Storage Chock, Rocket Motor, Model Designator H77-0315	03-30-78	3	U
3-5	1.4.2.3.6	TWR-11172 Rev D	Safe and Arm Device Structural Analysis SRM	03-01-78	3	U
3-5	1.4.2.3.4	TWR-11183	Analysis of Grain Structural Integrity	11-12-76	3	U
3-5	1.4.2.3.4	TWR-11229	Interim Report Development of Rapid In-Process Tests for Space Shuttle SRM Propellant	10-06-76	3	U
3-5	1.4.2.3.2	TWR-11247 Add D	Aero-Thermal Analysis Report for Space Shuttle	06-06-77	3	U
3-5	1.4.2.3.6	TWR-11252 Rev E	Space Shuttle S&A Barrier-Booster Housing Fracture Mechanics Analysis	03-29-79	3	U
3-5	1.4.2.3.2	TWR-11276	Thermal Evaluation of a SRM Center Segment During a Delayed Winter Transportation Schedule	10-05-76	3	U
3-5	1.4.2.2.2	TWR-11284 Rev A	Evaluation of Acoustical Holography for Non-Destructive Inspection of SRM Nozzle Flexible	12-16-76	3	U



PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5	1.4.2.3.5	TWR-11314	Space Shuttle Solid Rocket Motor Nozzle Water Impact Final Structural Analysis	12-01-76	3	U
3-5	1.4.2.3.6	TWR-11334	Tolerance Study of the Safe and Arm Mechanism the Solid Rocket Motor Igniter Used on the Space Shuttle SRM	02-18-77	3	U
3-5	1.4.2.3.4	TWR-11366	Space Shuttle SRM Inhibitor-to-Propellant Bondline Strength Analysis	07-14-77	3	U
3-5	1.4.2.2.2	TWR-11389	Hazards Analysis of Solid Rocket Motor Assembly Operations for Kennedy Space Center Vehicle Assembly Building	06-03-77	3	U
3-5	1.4.2.4.3	TWR-11410 Rev A	SRM Support Equipment Engineering Analysis for Rocket Motor Segments Cover Assembly and Railcar Tie-Down Assembly	04-10-77	3	U
3-5	1.4.2.4.3	TWR-11414 Rev B	SRM Support Equipment Engineering Analysis for Lifting Beam, Shipping Cover, Segment	09-20-79	3	U
3-5	1.4.2.3.5	TWR-11446	Failure Analysis Report, SRM Prototype Flexible Bearing No. 3	05-13-77	3	U
3-5	1.4.2.3.3	TWR-11499	SRM Aft Closure (Redesign) Analysis "Y" Joint Area	06-29-77	3	U
3-5	1.4.2.3.6	TWR-11518	Space Shuttle Igniter Chamber Transducer Bolt Analysis	07-21-77	3	U
3-5	1.4.2.3.3	TWR-11540	SRM Aft Closure (SN 0000001) Analysis, IRR 31544	08-04-77	3	U
3-5	1.4.2.4.5	TWR-11581 Rev A	SRM Support Equipment Engineering Analysis for Rocket Motor Segment Case Lifting Beam, Model Designator H77-0330	05-09-79	3	U
3-5	1.4.2.3.6	TWR-11646 Rev B	Space Shuttle Barrier Booster Housing - S&A Device Analysis Flight Configuration Redesign	03-03-78	3	U
3-5	1.4.2.3.6	TWR-11647 Rev B	Space Shuttle Barrier Booster Housing - S&A Device Analysis Test Configuration Redesign	03-03-78	3	U
3-5	1.4.2.3.3	TWR-11653	Rohr Hydroproof Report	02-15-79	3	U
3-5	1.4.2.3.3	TWR-11685	SRM Forward Case Segment "Y" Joint Redesign Analysis	01-12-78	3	U
3-5	1.4.2.3.3	TWR-11696	SRM Case Forward Segment Analysis per ECR No. 14549	01-13-78	3	U
3-5	1.4.2.4.5	TWR-11705 Rev A	SRM Support Equipment Engineering Analysis for Adapter, Support Stand, Segment and Support Stand Designator H77-0386 and H77-0400	01-05-79	3	U
3-5	1.4.2.3.5	TWR-11710	Stress Analysis of the Space Shuttle SRM DM-1 and DM-2 Nozzle Exit Cone	01-25-78	3	U
3-5	1.4.2.4.5	TWR-11711 Rev A	SRM Support Equipment Engineering Analysis for Lifting Beam - Vertical, Rocket Motor Segment - Two Legs, Model Designator H77-0338	01-26-78	3	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5	1.4.2.4.5	TWR-11716	Kit, Lifting Bracket, Model Designator H77-0325	06-09-78	3	U
3-5	1.4.2.3.4	TWR-11722	DM-2 Propellant Temperature Prediction	02-10-78	3	U
3-5	1.4.2.3.4	TWR-11731	Fracture Mechanics Analysis of Space Shuttle Grains	02-15-78	3	U
3-5	1.4.2.4.3	TWR-11746	Engineering Analysis for Handling Fixture, Igniter Case, Rocket Motor, Model Designator H77-0343	01-16-78	3	U
3-5	1.4.2.4.3	TWR-11747	Space Shuttle Structural Analysis and Presentation of DM-2 Static Firing Data	02-22-78	3	U
3-5	1.4.2.3.5	TWR-11770	Structural and Fracture Mechanics Analysis of the Space Shuttle SRM Compliance Ring, P/N 1U51241	03-06-78	3	U
3-5	1.4.2.3.4	TWR-11779	Space Shuttle SRM Propellant Dynamic Properties	March 78	3	U
3-5	1.4.2.4.3	TWR-11789	SRM Support Equipment Engineering Analysis for Chock Set, Transporter, Empty Segment, Rocket Motor, Model Designator H77-0397	01-26-78	3	U
3-5	1.4.2.3.3	TWR-11792	Analysis Report, 20°F Fracture Toughness Testing of Trim Material From Heat Treated Cylinders BYD-18 and GSF-29		3	U
3-5	1.4.2.4.5	TWR-11805	SRM Support Equipment Engineering Analysis for Handling Fixture, Case Disassembly, Model Designator H77-0371	04-11-78	3	U
3-5	1.4.2.4.3	TWR-11806	SRM Support Equipment Engineering Analysis for Transportation Kit Transported Rocket Motor Segment, Model Designator P77-0395	03-03-78	3	U
3-5	1.4.2.3.6	TWR-11807	Cover, Booster Assembly - S/A Device Analysis	04-11-78	3	U
3-5	1.4.2.3.4	TWR-11808	Propellant Small Void Investigation, Space Shuttle Solid Rocket Motor Forward Center Segment S/N 0000002 - Final Report	04-02-78	3	U
3-5	1.4.2.3.5	TWR-11810	SRM DM-1 and DM-2 Nozzle Boot Torque Allowables	04-11-78	3	U
3-5	1.4.2.3.6	TWR-11844 Rev A	Space Shuttle Safe and Arm Device Structural Analysis	07-05-79	3	U
3-5	1.4.2.3.6	TWR-11875	Evaluation of the Combustion Stability Characteristics of the Space Shuttle SRM 10th Development Igniter (DM-3 Igniter Configuration)	Aug 78	3	U
3-5	1.4.2.3.3	TWR-11886 Rev A	Systems Tunnel to SRM Bond Strength	08-28-78	3	U
3-5	1.4.2.3.3	TWR-11909 Rev B	Space Shuttle SRM TPS Analysis	06-27-78	3	U
3-5	1.4.2.3.2	TWR-11911	Solid Rocket Motor Thermal Protection System Critical Design Review	06-30-78	3	U
3-5	1.4.2.4.3	TWR-11927	Recommendation of Disposition of Discrepant SRM Segment Shipping Cover Lifting Beam H77-0304, P/N	07-17-78	3	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5	1.4.2.4.3	TWR-11929	Space Shuttle SRM, Lug, Lifting - Nozzle Com- ponents, Model Designator H77-0401	07-11-78	3	U
3-5	1.4.2.3.2	TWR-11965	Supporting SRM External Thermal Analysis Documents - Vol I	08-08-78	3	U
3-5	1.4.2.4.3	TWR-11987 Rev B	SRM Support Equipment Engineering Analysis for Lifting Beam, Utility, Model Designator H77-0354	05-30-79	3	U
3-5	1.4.2.3.4	TWR-12003	Space Shuttle Equipment Engineering Analysis for Properties	Oct 78	3	U
3-5	1.4.2.4.5	TWR-12012	SRM Support Equipment Engineering Analysis for Handling Dolly, Igniter Case, Model Designator H77-0334	07-12-79	3	U
3-5	1.4.2.3.3	TWR-12019	Analytical Evaluation of the Space Shuttle Solid Rocket Motor Tang-Clevis Joint Behavior	10-06-78	3	U
3-5	1.4.2.3.6	TWR-12060	Transmittal of SRM Ignition Design Characteristic Selection	01-08-79	3	U
3-5	1.4.2.3.4	TWR-12082	DM-3 Propellant Temperature Prediction	12-06-78	3	U
3-5	1.4.2.3.4	TWR-12182	Analysis of Space Shuttle Grain structural Integrity	04-19-79	3	U
3-5	1.4.2.3.6	TWR-12187	Revisions of Grain Structural Analysis of SRM Igniter		3	U
3-5	1.4.2.3.2	TWR-12202	DM-4 Propellant Temperature Prediction		3	U
3-5	1.4.2.3.4	TWR-12205	Space Shuttle SRM Nozzle Severance Ordnance Failure Investigation	03-29-79	3	U
3-5	1.4.2.3.2	TWR-12317 Rev A	Analysis of Space Shuttle SRM for Actual Cavity Collapse Loads and STA-1 Simulated Cavity Collapse Loads	06-09-80	3	U
3-5	1.4.2.4.3	TWR-12327	SRM Support Equipment Engineering Analysis of the Stiffener Ring Shipping Container P77-0425	05-16-79	3	U
3-5	1.4.2.3.10	TWR-12341	Bond Sample Tests for Hydraulic Fluid Contami- nation, STS-1A Aft Segment, Interim Report	Jun 79	3	U
3-5	1.4.2.3.6	TWR-12346	Update of SRM Igniter Flight Design	05-14-80	3	U
3-5	1.4.2.3.4	TWR-12386	QM-1 Propellant Temperature Prediction	07-05-79	3	U
3-5	1.4.2.3.3	TWR-12441	Evaluation of 1U51899 Pin Retainer Clips for Application in SRM/SRB Field Joints	08-15-79	3	U
3-5	1.4.2.3.4	TWR-12508	QM-2 Propellant Temperature Prediction	10-15-79	3	U
3-5	1.4.2.3.4	TWR-12509	SRM Forward Segment Transition Area Grain Repair (IRR 53779, 57133)		3	U
3-5	1.4.2.3.4	TWR-12561	SRM Forward Segment Transition Area Grain Repair (IRR 57039, 46917, 46918)	12-10-79	3	U

PART 1

DR NO. ==	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5	1.4.2.3.6	TWR-12634	NSI Redundant Seals Design Summary Report	02-22-80	3	U
3-5	1.4.2.3.4	TWR-12645	Space Shuttle SRM Slag Study	02-01-80	3	U
3-5	1.4.2.3.2	TWR-12669	QM-3 Propellant Temperature Prediction	03-19-80	3	U
3-5	1.4.2.3.5	TWR-12691 Amend 2	Flex Bearing Data Matrix, Space Shuttle SRM	04-15-80	3	U
3-5	1.4.2.3.6	TWR-12707 Rev A	Final Report of the Sealing Capabilities of the SRM Igniter Stainless Steel Retainer Inner Gasket	09-29-82	3	U
3-5	1.4.2.3.3	TWR-12718	SRM Forward Dome Residual Stress Test Report	05-03-80	3	U
3-5	1.4.2.3.6	TWR-12723	Effects of Aging on Space Shuttle SRM Igniter Propellant	05-06-80	3	U
3-5	1.4.2.3.2	TWR-12778	SRM Mass Properties STS-6 Flight Evaluation Input	04-27-83	3	U
3-5	1.4.2.3.2	TWR-12788	Analysis of QM-3 Temperature Measurements	08-05-80	3	U
3-5	1.4.2.3.3	TWR-12790	Evaluation of the SRM Aft Segment Boss - Flight Hydroproof Configurations	08-18-80	3	U
3-5	1.4.2.3.3	TWR-12805	Ultimate Strength Failure Envelope of D6AC Steel Based on Empirical Modification of the Maximum Distortion Energy Theorem	08-21-80	3	U
3-5	1.4.2.3.3	TWR-12844 Rev B	Analysis of the Redesigned Nozzle Port Dome for Case Proof Testing	05-06-83	3	U
3-5	1.4.2.3.3	TWR-12856	Proof Test Factors for STS-1 Systems Tunnel Bonds	11-19-80	3	U
3-5	1.4.2.3.3	TWR-12858	Analysis of the Original SRM Nozzle Port Dome at Proof Pressures	11-06-80	3	U
3-5	1.4.2.3.4	TWR-12879	Analysis of STS-1A and 1B (Forward Segment) Grain Structural Integrity	12-15-80	3	U
3-5	1.4.2.3.2	TWR-12887	SRM Thermal and Gas Dynamic State During Reentry (TD-124)	12-09-80	3	U
3-5	1.4.2.3.6	TWR-12924	Failure Analysis Report, Electrical Checkout Failure of SRM Igniter S&A	01-14-81	3	U
3-5	1.4.2.3.6	TWR-12935	Failure Analysis Report, Electrical Checkout Failure of SRM Igniter S&A (Partial Rotation)	04-01-81	3	U
3-5	1.4.2.3.3.	TWR-12944	Effects of Aging on SRM Systems Tunnel Bondlines	Feb 1981	3	U
3-5	1.4.2.4.3	TWR-12983	Feasibility Study Report, Solid Rocket Motor, Monolithic Shipping and Handling Ring	04-15-81	3	U
3-5	1.4.2.3.4	TWR-12994	STS-3A Forward Segment Transition and Igniter Region Grain Repair (IRRa 72795 and 72766)	03-17-81	3	U
3-5	1.4.2.3.4	TWR-12995	STS-3B SRM Forward Segment Transition Area Grain Grain Repair (IRR 72764)	03-18-81	3	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5	1.4.2.3.2	TWR-12996	Investigation of Side Force Oscillations During Static Firing of the Space Shuttle Solid Rocket Motor	03-24-81	3	U
3-5	1.4.2.3.6	TWR-13003	Test Results and Analysis for the Space Shuttle Igniter Life Demonstration Program	04-23-81	3	U
3-5	1.4.2.3.4	TWR-13008 Rev A	STS-2A Forward Segment Transition Area Grain Repair (IRR 60553)	04-30-81	3	U
3-5	1.4.2.3.4	TWR-13009	Final Summary Report, Replacement of PBNA in HB and HC Polymers Used in SRM Propellant and Liner	07-01-81	3	U
3-5	1.4.2.3.4	TWR-13010 Rev A	STS-2B SRM Forward Segment Grain Repair (IRR No. 60553)	Apr 81	3	U
3-5	1.4.2.3.2	TWR-13021	Flight Readiness Firings, Instrumentation Flight Evaluation Report	04-23-81	3	U
3-5	1.4.2.3.4	TWR-13040	Space Shuttle Solid Rocket Motor Grain Structural Integrity Analysis		3	U
3-5	1.4.2.3.2.	TWR-13053	SRM Mass Properties STS-1 Flight Evaluation Report		3	U
3-5	1.4.2.3.2	TWR-13055	Space Shuttle Solid Rocket Motor Flight Evaluation Report, STS-1 Propulsion Performance	06-09-81	3	U
3-5	1.4.2.3.7	TWR-13065	High Performance SRM Internal Insulation Design Report	09-14-82	3	U
3-5	1.4.2.3.2	TWR-13075 Part I	Postflight Evaluation of STS-1 SRM Components Returned to Morton Thiokol Part I - Case Assembly	03-02-82	3	U
3-5	1.4.2.3.2	TWR-13075 Part II	Postflight Evaluation of STS-1 SRM Components Returned to Morton Thiokol Part II - External Thermal Protection System	03-24-82	3	U
3-5	1.4.2.3.2	TWR-13075 Part III	Postflight Evaluation of STS-1 SRM Components Returned to Morton Thiokol Part III - Internal Case Insulation	04-09-82	3	U
3-5	1.4.2.3.2	TWR-13075 Part IV	Postflight Evaluation of STS-1 SRM Components Returned to Morton Thiokol Part IV - Systems Tunnel	03-02-82	3	U
3-5	1.4.2.3.2	TWR-13075 Part V	Postflight Evaluation of STS-1 SRM Components Returned to Morton Thiokol Part V - Ignition System	01-13-82	3	U
3-5	1.4.2.3.2	TWR-13075 Part VI	Postflight Evaluation of STS-1 SRM Components Returned to Morton Thiokol Part VI - Nozzle Assembly	11-02-81	3	U
3-5	1.4.2.3.2	TWR-13075 Part VII	Postflight Evaluation of STS-1 SRM Components Returned to Morton Thiokol Part VII - Instrumentation		3	U
3-5	1.4.2.3.2	TWR-13085	Solid Rocket Booster Flotation Evaluation		3	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5	1.4.2.3.2	TWR-13091	Predicted Surface Temperature Histories of STS-1 Calorimeters Using Recorded Heat Flux Data	07-13-81	3	U
3-5	1.4.2.3.2	TWR-13092	Description of the Shock Waves Generated During the Initial Ignition Transient of the Space Shuttle Solid Rocket Boosters	07-28-81	3	U
3-5	1.4.2.3.4	TWR-13179	STS-3B SRM Forward Segment Transient Area Grain Area (IRR No. 79510)	10-05-81	3	U
3-5	1.4.2.3.6	TWR-13238 Ammend 1	Use of Rebuilt Barrier Boosters	03-04-82	3	U
3-5	1.4.2.3.2	TWR-13244	Structural Temperature/TPS Evaluation of the Space Shuttle SRMs During STS-2 Flight	01-12-82	3	U
3-5	1.4.2.3.2	TWR-13259	Space Shuttle Solid Rocket Motor Flight Evaluation Report, STS-2 Propulsion Performance	01-06-82	3	U
3-5	1.4.2.3.2	TWR-13260	SRM Mass Properties STS-2 Flight Evaluation Input	01-08-82	3	U
3-5	1.4.2.3.2	TWR-13286 Part I	Postflight Evaluation of STS-2 SRM Components Returned to Morton Thiokol Part I - Case Assembly	01-01-83	3	U
3-5	1.4.2.3.2	TWR-13286 Part II	Postflight Evaluation of STS-2 SRM Components Returned to Morton Thiokol Part II - External Thermal Protection System	(Undated)	3	U
3-5	1.4.2.3.2	TWR-13286 Part III	Postflight Evaluation of STS-2 SRM Components Returned to Morton Thiokol Part III - Internal Case Insulation	(Undated)	3	U
3-5	1.4.2.3.2	TWR-13286 Part IV	Postflight Evaluation of STS-2 SRM Components Returned to Morton Thiokol Part IV - Systems Tunnel	09-23-81	3	U
3-5	1.4.2.3.2	TWR-13286 Part V	Postflight Evaluation of STS-2 SRM Components Returned to Morton Thiokol Part V - Ignition System	(Undated)	3	U
3-5	1.4.2.3.2	TWR-13286 Part VI	Postflight Evaluation of STS-1 SRM Components Returned to Morton Thiokol Part VI - Nozzle Assembly	04-08-82	3	U
3-5	1.4.2.3.2	TWR-13286 Part VII	Postflight Evaluation of STS-2 SRM Components Returned to Morton Thiokol Part VII - Instrumentation	10-27-82	3	U
3-5	1.4.2.3.2	TWR-13287	STS-4A SRM Forward Segment Transition Area Grain Repair (IRR No. 79550)	02-10-82	3	U
3-5	1.4.2.3.2	TWR-13320	Spectral Analysis of STS-2 Data Space Shuttle SRM Project	03-15-82	3	U
3-5	1.4.2.3.2	TWR-13353	SRM Mass Properties STS-3 Flight Evaluation Input	04-28-82	3	U
3-5	1.4.2.3.2	TWR-13364	Space Shuttle Flight Evaluation Report, STS-3 Propulsion Performance	05-05-82	3	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5	1.4.2.4.3	TWR-13366	Final Report, Simulated Monolithic Shipping and Handling Ring Demonstration Program, TD-135	05-07-82	3	U
3-5	1.4.2.3.5	TWR-13420	Space Shuttle High Performance Motor Center Segment Abnormal Flap Termination Analysis	06-09-82	3	U
3-5	1.4.2.3.2	TWR-13444 Part I	Postflight Evaluation of STS-3 SRM Components Returned to Morton Thiokol Part I - Case Assembly	06-20-83	3	U
3-5	1.4.2.3.2	TWR-13444 Part II	Postflight Evaluation of STS-3 SRM Components Returned to Morton Thiokol Part II - External Thermal Protection System	(Undated)	3	U
3-5	1.4.2.3.2	TWR-13444 Part III Rev A	Postflight Evaluation of STS-3 SRM Components Returned to Morton Thiokol Part III - Internal Case Insulation	02-01-84	3	U
3-5	1.4.2.3.2	TWR-13444 Part IV	Postflight Evaluation of STS-3 SRM Components Returned to Morton Thiokol Part IV - Systems Tunnel	03-17-83	3	U
3-5	1.4.2.3.2	TWR-13444 Part V	Postflight Evaluation of STS-3 SRM Components Returned to Morton Thiokol Part V - Ignition System	11-01-82	3	U
3-5	1.4.2.3.2	TWR-13444 Part VI	Postflight Evaluation of STS-3 SRM Components Returned to Morton Thiokol Part VI - Nozzle Assembly	01-01-83	3	U
3-5	1.4.2.3.2	TWR-13444 Part VII	Postflight Evaluation of STS-3 SRM Components Returned to Morton Thiokol Part VII - Instrumentation	03-28-83	3	U
3-5	FN201-02-06	TWR-13450	Final Report, Prediction of the Space Shuttle SRM Ignition Transient for the FWC Motor, Including the Application of Ignition Tailoring Concepts	06-15-82	3	U
3-5	1.4.2.3.2	TWR-13466	SRM Mass Properties STS-4 Flight Evaluation Input	07-26-82	3	U
3-5	1.4.2.3.2	TWR-13472	STS-3 Postflight Internal Insulation Evaluation	07-23-82	3	U
3-5	1.4.2.3.6	TWR-13473	Failure Analysis for Space Shuttle Safe and Arm, 1U51960-01 S/N 0000002	09-21-82	3	U
3-5	1.4.2.3.2	TWR-13549	Evaluation of the SRM Aft Segment Stiffener Ring Assemblies for Various SRB Cavity Collapse Water Impact Loads	12-23-82	3	U
3-5	1.4.2.3.6	TWR-13588	Space Shuttle SRM Ignition System Dual Seal Plug Qualification By Similarity Report	11-08-82	3	U
3-5	1.4.2.3.4	TWR-13590	DM-5 Propellant Temperature Prediction	11-15-82	3	U
3-5	1.4.2.3.2	TWR-13604	Structural Temperature/TPS Evaluations of the Space Shuttle SRMs During STS-5 Flight	01-05-83	3	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5	1.4.2.3.2	TWR-13607 Part I	Postflight Evaluation of STS-5 SRM Components Returned to Morton Thiokol Part I - Case Assembly	Sep 83	3	U
3-5	1.4.2.3.2	TWR-13607 Part II	Postflight Evaluation of STS-5 SRM Components Returned to Morton Thiokol Part II - External Thermal Protection System	Jul 83	3	U
3-5	1.4.2.3.2	TWR-13607 Part III	Postflight Evaluation of STS-5 SRM Components Returned to Morton Thiokol Part III - Internal Case Insulation	Oct 83	3	U
3-5	1.4.2.3.2	TWR-13607 Part IV	Postflight Evaluation of STS-5 SRM Components Returned to Morton Thiokol Part IV - Systems Tunnel	Jul 83	3	U
3-5	1.4.2.3.2	TWR-13607 Part V	Postflight Evaluation of STS-5 SRM Components Returned to Morton Thiokol Part V - Ignition System	Jul 83	3	U
3-5	1.4.2.3.2	TWR-13607 Part VI	Postflight Evaluation of STS-5 SRM Components Returned to Morton Thiokol Part VI - Nozzle Assembly	Jul 83	3	U
3-5	1.4.2.3.2	TWR-13607 Part VII	Postflight Evaluation of STS-5 SRM Components Returned to Morton Thiokol Part VII - Instrumentation	Jul 83	3	U
3-5	1.4.2.3.2	TWR-13610	Space Shuttle Flight Evaluation Report STS-5 Propulsion Performance	01-31-83	3	U
3-5	1.4.2.3.2	TWR-13611	SRM Mass Properties STS-5 Flight Evaluation Input	12-08-82	3	U
3-5	1.4.2.3.2	TWR-13615	Space Shuttle SRM STS-5 Load Verification and Structural Response Flight Evaluation Final Report	12-09-82	3	U
3-5	1.4.2.5.2	TWR-13631	Final Report, Prototype Pin Puller, TD-140	12-21-82	3	U
3-5	HQ301	TWR-13694 Rev C	RSRM Aluminum System Tunnel Structural Analysis	Sept 88	3	U
3-5	1.4.2.3.2	TWR-13698	Spectral Analysis of STS-5 Data	03-04-83	3	U
3-5	1.4.2.3.4	TWR-13747	QM-4 Propellant Temperature Prediction	04-11-83	3	U
3-5	1.4.2.3.2	TWR-13784	Space Shuttle STS-6 Load Verification and Structural Response Flight Evaluation, Final Report	04-27-83	3	U
3-5	1.4.2.3.2	TWR-13792	Space Shuttle Flight Evaluation Report STS-6 Propulsion Performance	05-02-83	3	U
3-5	1.4.2.3.10	TWR-13797	QM-4 Axial Elongation Measurements	06-10-83	3	U
3-5	1.4.2.3.2	TWR-13813	Structural Temperature/TPS Evaluation of the Space Shuttle SRMs During STS-6 Flight	05-20-83	3	U



PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5	1.4.2.3.10	TWR-13824	Low Frequency Accelerometer Data From the Space Shuttle QM-4 Static Firing	05-20-83	3	U
3-5	HN102	TWR-13837	Predicted Ballistic Performance for STS-8	05-20-83	3	U
3-5	1.4.2.3.2	TWR-13851	Effect of Case Expansion on FWC-SRM Ballistic Performance	Jun 83	3	U
3-5	1.4.2.3.2	TWR-13879	SRM Mass Properties Summary Development Flight Evaluation Input	07-06-83	3	U
3-5	1.4.2.3.2	TWR-13881	Spectral Analysis of STS-6 Data	06-28-83	3	U
3-5	1.4.2.3.10	TWR-13895	Flow Testing of SRM Nozzle Protective Screen Fabric Candidates	07-12-83	3	U
3-5	1.1.1.3.1	TWR-13903	Space Shuttle Flight Evaluation Report STS-7 Propulsion Performance	07-18-83	3	U
3-5	1.4.2.3.6	TWR-13914	Space Shuttle SRM Use of Randolph Products Company's Vacuum Putty in Igniter Assembly Qualification by Similarity Report	07-13-83	3	U
3-5	1.1.1.3.1	TWR-13914	SRM Mass Properties STS-7 Flight Evaluation Input	07-18-83	3	U
3-5	1.4.2.3.2	TWR-13921	Summary SRM Structural/Component Temperature and TPS Development Flight Evaluation Report STS-1 through STS-6	07-21-83	3	U
3-5	1.4.2.3	TWR-13925	Transmittal of Postflight Inspection of STS-6 SRM Components at KSC	09-15-83	3	U
3-5	1.4.2.3.10	TWR-13927	High Performance Motor (HPM) SRB Nozzle Cover Thermal Analysis for Flight Readiness Firing (FRF) Environment	Jul 83	3	U
3-5	1.1.1.3	TWR-13938	Space Shuttle Solid Rocket Motor Project Report 100% Radiographic Inspection of Loads SRM Segments in Production	01-23-84	3	U
3-5	1.1.1.3	TWR-13940	Selective Brush Plating Development Testing	03-04-84	3	U
3-5	HN102	TWR-13963	Postflight Inspection of STS-7 SRM Components at KSC	12-22-83	3	U
3-5	1.4.2.3.2	TWR-13970	Space Shuttle Development Flight Load Verifi- cation and Structural Response Flight Evaluation Summary Report	08-29-83	3	U
3-5	HN102	TWR-13992	SRM Mass Properties, STS-8 Flight Evaluation Input	09-22-83	3	U
3-5	HN102	TWR-14000	Space Shuttle Flight Evaluation Report, STS-8 Propulsion Performance	10-21-83	3	U
3-5	HQ301	TWR-14143 Rev 0	Stress Analysis Report, SRM Systems Tunnel	10-29-86	3	U
3-5	1.1.1.3	TWR-14165	Fracture Mechanics Evaluation of SRM Handling Ring Components	01-05-84	3	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5	1.1.1.3	TWR-14170	SRM Stiffener Segment Cracked Stub Flange Study	01-13-84	3	U
3-5	1.1.1.3	TWR-14204	Postflight Inspection of STS-8 SRM Components	09-06-84	3	U
3-5	1.1.1.3	TWR-14232	SRM Mass Properties 41B (STS-11) Flight Evaluation Input	01-20-84	3	U
3-5	1.1.1.3	TWR-14260	STS-8 Postflight Internal Insulation Evaluation	05-16-84	3	U
3-5	1.1.1.3	TWR-14265	Space Shuttle SRM Lightweight Case, Case and Joint Elongation Measurement Proof Test Analysis and Report	03-01-84	3	U
3-5	1.1.1.3	TWR-14273	Space Shuttle Flight Evaluation Report, SRM-10 Propulsion Performance	03-01-84	3	U
3-5	1.1.1.3	TWR-14273	Postflight Evaluation of SRM Nozzle Components STS-9A and STS-9B	Mar 84	3	U
3-5	FN301	TWR-14327	Aft Segment Propellant Grain Structural Capability for OR-106098 Filament Wound Case Delamination	04-01-84	3	U
3-5	1.1.1.3	TWR-14330	SRM Mass Properties 41C (STS-13) Flight Evaluation Input	04-13-84	3	U
3-5	1.1.1.3	TWR-14363	Dimensional Measurement Data of Production LSC Cross Sections	05-01-84	3	U
3-5	1.1.1.3	TWR-14368	Space Shuttle Flight Evaluation Report SRM-11 Propulsion Performance (STS-41C)	05-02-84	3	U
3-5	1.1.1.3	TWR-14392 Rev B	Space Shuttle SRM Safety and Arming Device Recovery Plan for S&A S/N 0000016	03-05-85	3	U
3-5	1.1.1.2	TWR-14415 Rev G	Historical Ballistics Performance/Hardware	09-03-85	3	U
3-5	FN301	TWR-14463	Space Shuttle Solid Rocket Motor Filament Wound Case Cavity Collapse Analysis for Initial Flight Designs	06-21-84	3	U
3-5	1.1.2.1	TWR-14482	Application of Automatic Identification Technology for Space Shuttle Programs	Jul 84	3	U
3-5	1.1.1.3.1	TWR-14485	Space Shuttle Solid Rocket Motor Insulation-to-Case Debond Structural Integrity Analysis	07-11-84	3	U
3-5	FN301	TWR-14537 Rev A	CDR Report FWC-SRM Propellant Grain Structural Analysis	02-12-85	3	U
3-5	1.1.1.3	TWR-14591	STS-13 (SRM-11) Nozzle Component Postflight Evaluation Report	09-04-84	3	U
3-5	FN301	TWR-14598	Predicted Axial Line Loads for DM-6 (Filament Wound Case)	09-18-84	3	U
3-5	1.1.1.3	TWR-14599	SRM Mass Properties STS-41D Flight Evaluation Input		3	U
3-5	1.1.1.3	TWR-14603	SRM Mass Properties STS-41G Flight Evaluation	10-19-84	3	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5	1.1.1.3	TWR-14604	SRM Mass Properties STS-51A Flight Evaluation	11-20-84	3	U
3-5	1.1.1.2	TWR-14605	SRM Mass Properties STS-51C Flight Evaluation	02-07-85	3	U
3-5	1.1.1.3	TWR-14631	Space Shuttle Flight Evaluation Report SRM-13 Propulsion Performance (STS-41D)	09-20-84	3	U
3-5	1.1.1.2	TWR-14633	Aerothermal Analysis of the High Performance	01-15-85	3	U
3-5	1.1.1.3	TWR-14673	Space Shuttle Flight Evaluation Report SRM-12 Propulsion Performance (STS-41G)	10-31-84	3	U
3-5	1.1.1.2	TWR-14688	SRM Forward Segment Transition Region Redesign	11-28-84	3	U
3-5	1.1.1.2	TWR-14705	Transmittal of STS-14 (SRM-13) Nozzle Components Postflight Evaluation Report	12-10-84	3	U
3-5	FN301	TWR-14718	FWC-SRM Forward and Center Segment Flap Termination	Dec 84	3	U
3-5	1.1.1.2	TWR-14725	Bushing Analysis to be Used on Stiffener Segment Stub Flange Holes	12-14-84	3	U
3-5	FN301	TWR-14732	Thermal Protection Test, SRM Filament Wound Case Tunnel Specimens, Hot Gas Facility	01-31-85	3	U
3-5	1.1.1.1	TWR-14737	Disposition of DR 97474, Mismatched Aft Case Segment	01-23-85	3	U
3-5	1.1.1.2	TWR-14769	Space Shuttle Flight Evaluation Report SRM-14 Propulsion Performance	01-14-85	3	U
3-5	FN301	TWR-14785	Space Shuttle SRM FWC Steel-Steel Joint Pin Retainer Bands 1, Interim Band 2, Flight Band	01-21-85	3	U
3-5	1.1.1.2	TWR-14790 Rev A	SRM Clevis Opening Dimension Evaluation Study	10-21-85	3	U
3-5	FN301	TWR-14797	Space Shuttle FWC DA-009 Delamination Cavity Collapse Analysis	01-30-85	3	U
3-5	FN301	TWR-14806	FWC DM-7 Center Aft Segment Propellant Grain Structural Analysis	02-01-85	3	U
3-5	1.1.1.2	TWR-14809	SRM Grain Cover Seal Analysis	02-01-85	3	U
3-5	1.1.1.2	TWR-14819	STS-17 (SRM-12) Nozzle Component Postflight Evaluation Report	02-15-85	3	U
3-5	1.1.1.2	TWR-14820	Space Shuttle Flight Evaluation Report, SRM-15	02-06-85	3	U
3-5	1.1.1.2	TWR-14823	STS-20A Center/Forward Segment Structural Capability	02-11-85	3	U
3-5	1.1.1.2	TWR-14836	VLS-01 Segment Propellant Grain Structural Capability Analysis (DR 113547)	02-14-85	3	U
3-5	FN301	TWR-14881	VLS-1 Forward Segment Castable Inhibitor Structural Capability (DR-121444)	03-11-85	3	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5	FN301	TWR-14883	FWC DM-7 Aft Segment EPDM/NBR Structural Capability (DR-117151)	03-12-85	3	U
3-5	FN301	TWR-14888	Space Shuttle FWC DA-007 Delamination Cavity Collapse Analysis	03-27-85	3	U
3-5	FN301	TWR-14912	Longitudinal Static Analysis of the Space Shuttle FWC-SRM During DM-6 Static Firing	04-16-85	3	U
3-5	NO-NUMBER	TWR-14920	Preliminary Assessment of Space Shuttle SRM Performance for the High Rate Heads Up Design		3	U
3-5	1.1.1.2	TWR-14925	SRM 1U52995 Ignition Safety and Arming Device Certification Plan	01-01-86	3	U
3-5	1.1.1.2	TWR-14945	SRM Mass Properties STS-51D/SRM-17 Flight Evaluation	04-30-85	3	U
3-5	FN301	TWR-14961 Rev A	EPDM/NBR Insulation Unbonds VLS-1 Aft Segment Domes (DR 117154 and DR 117156)	07-26-85	3	U
3-5	FN301	TWR-14962	Space Shuttle FWC Slapdown Analysis	05-02-85	3	U
3-5	1.1.1.2	TWR-14966	SRM Mass Properties STS-51B/SRM-16 Flight Evaluation	05-07-85	3	U
3-5	1.1.1.2	TWR-14982	Space Shuttle Flight Evaluation Report SRM-16 Propulsion Performance	05-07-85	3	U
3-5	1.1.1.2	TWR-14983	Space Shuttle Flight Evaluation Report SRM-17 Propulsion Performance	04-19-85	3	U
3-5	1.1.1.2	TWR-15047 Rev C	Disposition of DR 97495 Mismatched Countersink Hold on Aft Case Segment		3	U
3-5	1.1.1.2	TWR-15049	STS-168 Forward Segment Flap Tear Structural Analysis	06-24-85	3	U
3-5	1.1.1.2	TWR-15049	Impact Assessment of Increasing SRM Burn Rate from 0.386 to 0.392 In/Sec (Heads Up Vs. Heads Down Shuttle Performance Improvement Study)	07-23-85	3	U
3-5	1.1.1.2	TWR-15099	Space Shuttle Flight Evaluation Report Propulsion Performance (STS-51G)	07-10-85	3	U
3-5	1.1.1.2	TWR-15117	Preliminary SRM Nozzle/Field Joint Seal Concepts		3	U
3-5	FN301	TWR-15119	Space Shuttle Quarter-Scale FWC Cavity Collapse Buckling Test Analysis	07-29-85	3	U
3-5	1.1.1.2	TWR-15144	SRM Mass Properties STS-51F/SRMOM019 Flight Evaluation	08-09-85	3	U
3-5	1.1.1.2	TWR-15145	Space Shuttle Flight Evaluation Report SRM-19 Propulsion Performance (STS-51F)	08-09-85	3	U
3-5	FN301	TWR-15185	Filament Wound Case Solid Rocket Motor (FWC-SRM) Program FWC Reusability Evaluation	10-09-85	3	U
3-5	1.1.1.2	TWR-15185 Addend 1	STS-51B (SRM-16) Nozzle Component Postflight	11-19-85	3	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5	1.1.1.2	TWR-15191	SRM Mass Properties STS-51-L/SRM-1020 Flight Evaluation	09-19-85	3	U
3-5	1.1.1.2	TWR-15192	STS-51C (SRM-15) Nozzle Component Postflight Evaluation Report	08-28-85	3	U
3-5	1.1.1.2	TWR-15204	Engineering Study Field and Nozzle Joint Mating with Modified O-Rings and Joint Fillers	Sep 85	3	U
3-5	1.1.1.2	TWR-15206	STS-51G (SRM-18) Nozzle Component Postflight Evaluation Report	09-17-85	3	U
3-5	1.1.1.2	TWR-15209	Qualification of Selective Brush Plating Electrode Position of Cadmium on 7075-T73 Aluminum	09-18-85	3	U
3-5	1.1.1.2	TWR-15210	Space Shuttle Flight Evaluation Report SRM-20 Propulsion Performance (STS-51I)	09-16-85	3	U
3-5	1.1.1.2	TWR-15244	Analysis for the Repair of Inboard Cracks on Stiffener Stub Flange Holes	10-02-85	3	U
3-5	FN301	TWR-15247	Space Shuttle FWC STA-2B Cavity Collapse Analysis	Apr 86	3	U
3-5	NO-NUMBER	TWR-15255	The Effects of the Increased Heads Up Burn Rate on the SRM Internal Insulation Design	09-20-85	3	U
3-5	1.1.1.2	TWR-15266	Stress and Joint Rotation Evaluation of the Space Shuttle Captive Tang/Clevis Joint	01-24-86	3	U
3-5	1.1.1.2	TWR-15268	STS-27A SRM Forward Segment Structural Capability (DR No. 135086)	10-07-85	3	U
3-5	1.1.1.2	TWR-15269	STS-51D (SRM-17) Nozzle Component Postflight Evaluation Report	10-20-85	3	U
3-5	1.1.1.2	TWR-15274	SRM Mass Properties STS-51J/SRM-L021 Flight Evaluation	10-18-85	3	U
3-5	1.1.1.2	TWR-15287 Rev C	Special Procurement Instructions for Space Shuttle SRM Nozzle Materials	02-24-86	3	U
3-5	1.1.1.2	TWR-15289 Rev A	Space Shuttle Flight Evaluation Report SRM-21 Propulsion Performance (STS-51J)	12-04-85	3	U
3-5	1.1.1.2	TWR-15303 Rev A	STS-26A Center Aft Segment Liner Structural Integrity (DR 135807)	03-05-86	3	U
3-5	1.1.1.2	TWR-15332	SRM Mass Properties STS-61A/SRM L022 Flight Evaluation	11-18-85	3	U
3-5	1.1.1.2	TWR-15333	SRM-21 Center Segment Insulation Structural Integrity	Nov 85	3	U
3-5	1.1.1.2	TWR-15335	Static Test of O-Ring Validation Motors	11-17-85	3	U
3-5	1.1.1.2	TWR-15351	Study of Sealing Capability of the SRM Inner Igniter Gask-O-Seal	11-18-85	3	U
3-5	1.1.1.2	TWR-15353	Re-Evaluation of SRM Anomalies and Review of Associated Documentation	02-14-86	3	U
3-5	1.1.1.2	TWR-15355	Biaxial Improvement Test Program for Steel Case SRM	12-19-85	3	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5	1.1.1.2	TWR-15362	Structural Evaluation of the SRM-19A Nozzle	01-19-86	3	U
3-5	1.1.1.2	TWR-15364	STS-51F (SRM-19) Nozzle Component Postflight Evaluation Report	01-31-86	3	U
3-5	1.1.1.2	TWR-15367	SRM Nozzle Adhesive and Sealant Evaluation	11-06-85	3	U
3-5	1.1.1.2	TWR-15374	Space Shuttle Flight Evaluation Report SRM-22 Propulsion Performance	12-04-85	3	U
3-5	1.1.1.2	TWR-15381	Space Shuttle Flight Evaluation Report SRM-23 Propulsion Performance	12-09-85	3	U
3-5	NO-NUMBER	TWR-15388	Space Shuttle SRM Filament Wound Case Joint Analysis (Heads Up)	12-16-85	3	U
3-5	1.1.1.2	TWR-15408	STS-28A Center Forward Segment Propellant Grain Structural Integrity (DR 12691)	01-07-86	3	U
3-5	1.1.1.2	TWR-15411	SRM-29A Forward Segment Structural Capability	01-05-86	3	U
3-5	NO-NUMBER	TWR-15438	Preliminary Analysis of SRM Heads Up Configuration	01-17-86	3	U
3-5	1.1.1.2	TWR-15450	SRM Mass Properties STS-61C (SRM-L024) Flight Evaluation	01-23-86	3	U
3-5	1.1.1.2	TWR-15451	SRM Mass Properties "Block Predictions" Flight Evaluation		3	U
3-5	1.1.1.2	TWR-15455	STS 51-J (SRM-21) Nozzle Component Postflight Evaluation Report	07-01-86	3	U
3-5	NO-NUMBER	TWR-15456	FWC Heads Up Composite Component Assessment	01-27-86	3	U
3-5	1.1.1.2	TWR-15465	Space Shuttle Flight Evaluation Report SRM-24 Propulsion Performance (STS-61C)	01-27-86	3	U
3-5	1.1.1.2	TWR-15511 Rev A	STS-8A Nozzle Erosion Investigation Interim Report	03-05-86	3	U
3-5	1.1.1.2	TWR-15531	STS-51A (SRM-14) Nozzle Component Postflight Evaluation Report	02-15-86	3	U
3-5		TWR-15552	Space Shuttle SRM Heads Up Performance Improvement Study Final Summary Report	04-01-86	3	U
3-5		TWR-15558	Space Shuttle SRM Heads Up Miscellaneous Studies	04-04-86	3	U
3-5		TWR-15583 Rev E Vol 1	RSRM Design Requirements/Compliance Assembled Motor	05/26/89	3	U
3-5		TWR-15583 Rev F Vol 10	RSRM Design Requirements/Compliance Liner	05/26/89	3	U
3-5		TWR-15583 Rev F Vol 11	RSRM Design Requirements/Compliance Igniter	05/26/89	3	U
3-5		TWR-15583 Rev F Vol 12	RSRM Design Requirements/Compliance Nozzle	05/26/89	3	U
3-5		TWR-15583 Rev F Vol 13	RSRM Design Requirements/Compliance Joint Environmental Protection System	05/26/89	3	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5		TWR-15583 Rev F Vol 14	RSRM Design Requirements/Compliance Opt/Electrical Instrumentation	05/26/89	3	U
3-5		TWR-15583 Rev F Vol 15	RSRM Design Requirements/Compliance S&A	05/26/89	3	U
3-5		TWR-15583 Rev E Vol 2	RSRM Design Requirements/Compliance Case Assembly	10/07/88	3	U
3-5		TWR-15583 Rev F Vol 3	RSRM Design Requirements/Compliance Systems Tunnel	05/26/89	3	U
3-5		TWR-15583 Rev F Vol 4	RSRM Design Requirements/Compliance Field Joint	05/26/89	3	U
3-5		TWR-15583 Rev F Vol 5	RSRM Design Requirements/Compliance Factory Joint	05/26/89	3	U
3-5		TWR-15583 Rev F Vol 6	RSRM Design Requirements/Compliance Nozzle/Case Joint	05/26/89	3	U
3-5		TWR-15583 Rev F Vol 7	RSRM Design Requirements/Compliance Igniter/Case Joint	05/26/89	3	U
3-5		TWR-15583 Rev F Vol 8	RSRM Design Requirements/Compliance Insulation/TPS	05/26/89	3	U
3-5		TWR-15583 Rev F Vol 9	RSRM Design Requirements/Compliance Propellant	05/26/89	3	U
3-5	HQ301	TWR-15626	Space Shuttle SRM Throat Inlet Assembly Erosion Assessment	08-02-86	3	U
3-5	HQ301	TWR-15629	Space Shuttle SRM Nose/Inlet Assembly Erosion Assessment	07-07-87	3	U
3-5	HQ301	TWR-15675 Rev I	SRM Component and Discrepancy Codes	04/03/89	3	U
3-5	HQ	TWR-15680	Space Shuttle SRB Axial Growth Comparison Static Fire Configuration Vs Flight Simulation	07-21-86	3	U
3-5	FN301	TWR-15693	FWC SRM-VLS Interim Process for ESD Hazards	Jul 86	3	U
3-5		TWR-15714	STS 61A (SRM-22) Nozzle Component Postflight Evaluation Report	08-17-86	3	U
3-5	FN301	TWR-15759	Electrostatic Hazard Characteristics of SRM Propellant (TP-H1148) and the Filament Wound Case (FWC)	07-15-86	3	U
3-5	HQ301	TWR-15771	O-Ring Squeeze and Gland Fill Calculation Method	06-08-87	3	U
3-5	NO-NUMBER	TWR-15775 Rev A	SRM Nozzle Phenolic Scrap Study	09-04-86	3	U
3-5		TWR-15892 Rev C	SRM Components Cross Reference of Applicable JSCM 8080 Standards	08/11/88	3	U
3-5		TWR-15995 Rev A	Space Shuttle RSRM Nozzle Materials Data Book	11/25/88	3	U
3-5	HQ301	TWR-16006	Space Quality Engineering and Performance and Advanced Design Internal Insulation Edge Unbond		3	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5	HQ301	TWR-16020	Evaluation of O-ring Pressure Seals on the Space Shuttle SRM Safety and Arming Device	09-15-87	3	U
3-5		TWR-16031	Preliminary Analysis of Metal Systems Tunnel Bondline Adhesion Capability with Temperature Effects		3	U
3-5	HQ405	TWR-16072	RSRM Nozzle Removal System Model Designator H77-0459 Stress Analysis	07/15/88	3	U
3-5	HQ301	TWR-16097	Thermal Analysis/Verificaton of Morton Thiokol SRM Joint Heater Design	03-30-88	3	U
3-5	HQ301	TWR-16101	Structural Analysis of RSRM Modified Ignition System 3-D Model	03-10-88	3	
3-5	HQ301	TWR-16125 Rev C	Plan for the Modified Weight and CG System Recertification and Resumption of RSRML Configuration Motor Segments Weight Sampling	12-15-87	3	U
3-5	HQ301	TWR-16167	RSRM Insulation System Similarity Analysis	03-01-88	3	U
3-5	HQ301	TWR-16188 Rev A	Field Joint Insulation Integrity Analysis	04-01-88	3	U
3-5	HQ301	TWR-16190 Rev A	Factory Joint Insulation Seal Integrity	02-01-88	3	U
3-5	HQ301	TWR-16220	Evaluation of Composite Stiffening Rings on the Forward Field Joint of ETM	04-13-87	3	U
3-5	HQ301	TWR-16240	Thermal Analysis of the DM-8 Nozzle	06-11-87	3U	
3-5	HQ102	TWR-16278 Rev A	HPM Internal Insulation Database for the RSRM Design	08/05/88	3	U
3-5	HQ301	TWR-16295	Structural Analysis of the DM-8 Nozzle	07-31-87	3	U
3-5	HQ301	TWR-16301	Space Shuttle Solid Rocket Motor Project Space Quality Engineering Plan for RSRM Process Validation	02-01-87	3	U
3-5	HQ301	TWR-16336 Rev A	O-Ring Gland Surface Finish Study	04-07-87	3	U
3-5	HQ301	TWR-16339 Rev B	Thermal Analysis of SRM Igniter Design Changes	03-30-88	3	U
3-5	HQ301	TWR-16340 Rev A	Nondestructive Radiographic Criteria for the Space Shuttle Solid Rocket Motor Nozzle Phenolic Components	02-02-88	3	U
3-5	HQ301	TWR-16352	Properties of SRM-Overwrap Stiffener Rings	04-01-87	3	U
3-5	48102	TWR-16362	Structural Analysis of the Accelerometer Mounting Block	09/02/88	3	U
3-5	HQ101	TWR-16405	RSRM Igniter Band Installation Assembly, Design and Structural Analysis	11/05/88	3	U
3-5	HQ301	TWR-16416	Pressurization of the Aft End Ring to the Fixed Housing Joint of PVM-1	09/01/88	3	U



PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5		TWR-16421	System Tunnel Loads	09/14/88	3	U
3-5	HQ302	TWR-16435	QM-7 Global Model Transient Post Test Correlation	09/15/88	3	U
3-5		TWR-16437	Shuttle Case Temperature Profile During Normal Refurbishment Hydrotest	09/14/88	3	U
3-5		TWR-16450	Flow/Thermal Volume-Filling Analysis of Field Joint Edge Debond	11/01/88	3	U
3-5	HQ301	TWR-16467	Plan for Nondestructive Inspection Methods for the SRM-27 and -28 Segments to be Returned to KSC		3	U
3-5	4B202	TWR-16471	Acoustic Analysis of the RSRM Safe and Arm Device	07/11/88	3	U
3-5	HQ301	TWR-16471 Vol 1	DM-8 Postfire Inspection Standard (Wasatch T-24 Test Facility)	07-17-87	3	U
3-5	HQ301	TWR-16471 Vol 2	DM-8 Postfire Engineering Evaluation Plan (Clefield H-7 Facility)	09-11-87	3	U
3-5	HQ301	TWR-16472 Vol 7	DM-9 Postfire engineering Evaluation Plan (Joint Protection System Component)	12-01-87	3	U
3-5	HQ302	TWR-16473 Addend C Vol 3	PVM-1 Unique Postfire Evaluations	07/08/88	3	U
3-5	HQ301	TWR-16473 Vol III Addend D	Qualification and Production Verification Motor Postfire Engineering Evaluation Plan - Case Internal Insulation Component	11/21/88	3	U
3-5	HQ301	TWR-16473 Vol IV Rev B	Qualification and Production Verification Motor Postfire Engineering Evaluation Plan - Seals Component	01/13/89	3	U
3-5	HQ301	TWR-16473 Vol IX Rev A	Qualification and Production Verification Motor Postfire Engineering Evaluation Plan - Instrumentation Component	11/10/88	3	U
3-5	HQ301	TWR-16473 Vol VI	Qualification and Production Verification Motor Postfire Engineering Evaluation Plan - Ignition System Component	04-01-88		
3-5	HQ301	TWR-16473 Vol VII Rev A	Qualification and Production Verification Motor Postfire Engineering Evaluation Plan - Joint Protection System Component	04-01-88		
3-5		TWR-16474 Vol 1	Technical Evaluation Motor Postfire Engineering Plan (System Overview)	10/21/88	3	U
3-5	HQ302	TWR-16474 Vol 2 Rev A	Technical Evaluation Motor Postfire Engineering Evaluation Plan (Case Component)	01/27/89	3	U
3-5		TWR-16474 Vol 3	Technical Evaluation Motor Postfire Engineering Evaluation Plan (Case Internal Insulation Component)	10/21/88	3	U
3-5		TWR-16474 Vol 4	Technical Evaluation Motor Postfire Engineering Evaluation Plan (Seals Component)	10/21/88	3	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5		TWR-16474 Vol 5	Technical Evaluation Motor Postfire Engineering Evaluation Plan (Ignition System Component)	10/21/88	3	U
3-5		TWR-16474 Vol 6	Technical Evaluation Motor Postfire Engineering Evaluation Plan (Nozzle Component)	10/21/88	3	U
3-5		TWR-16474 Vol 9	Technical Evaluation Motor Postfire Engineering Evaluation Plan (Instrumentation Component)	10/21/88	3	U
3-5	48601	TWR-16475 Bk 1 Vol 1 Rev C	KSC Postflight Engineering Evaluation Plan (Joint Protection System Component)	04/20/89	3	U
3-5	48601	TWR-16475 Bk 1 Vol 2 Rev B	KSC Postflight Engineering Evaluation Plan (Case Component)	02 24/89	3	U
3-5	48601	TWR-16475 Bk 1 Vol 5 Rev C	KSC Postflight Engineering Evaluation Plan (Nozzle Component)	04/19/89	3	U
3-5	48601	TWR-16475 Bk 1 Vol 6 Rev A	KSC Postflight Engineering Evaluation Plan (Ignition System Component)	04/27/89	3	U
3-5	48601	TWR-16475 Bk 1 Vol 7 Rev B	KSC Postflight Engineering Evaluation Plan (Joint Protection System Component)	11/23/88	3	U
3-5	48601	TWR-16475 Bk 1 Vol 8 Rev A	KSC Postflight Engineering Evaluation Plan (Systems Tunnel Component)	11/23/88	3	U
3-5	48601	TWR-16475 Bk 1 Vol 9 Rev C	KSC Postflight Engineering Evaluation Plan (Instrumentation Component)	04/17/89	3	U
3-5	48601	TWR-16475 Bk 2 Vol 3 Rev C	Clearfield Postflight Engineering Evaluation Plan (Case Insulation Component)	06/10/89	3	U
3-5	48601	TWR-16475 Bk 2 Vol 4 Rev A	Clearfield Postflight Engineering Evaluation Plan (Seals Component)	04/14/89	3	U
3-5	48601	TWR-16475 Book 2 Vol 6	Clearfield Postflight Engineering Evaluation Plan (Ignition System Component)	10/07/88	3	U
3-5	HQ301	TWR-16496 Rev B	Thermal Response of the Redesigned Field and Factory Joints of the Space Shuttle Solid Rocket Motor	02-18-88	3	U
3-5	HQ301	TWR-16514	Structural Analysis for the High Performance Motor Nozzle Joint Environmental Simulator	12-15-87	3	U
3-5	HQ301	TWR-16517 Rev C	Thermal Performance of Steel Case SRM Systems Tunnel with Cork and MAS-1 as Protective Materials	07-08-88	3	U
3-5	HQ301	TWR-16526	Thermal Response of SRB Aft Segment Stiffener Rings and Stubs due to External and Internal Thermal Environments	02-19-88	3	U
3-5	HQ301	TWR-16544	Operation Procedure Field Joint Assembly Fixture Installation and Removal	09-23-87	3	U
3-5	HQ301	TWR-16563	Structural Analysis of the Space Shuttle SRM Nozzle Plug	01-12-88	3	U
3-5	HQ301	TWR-16570	Natural Frequencies of the Transient Pressure Test Article (TPTA) Parthfinder and Effects of	07-13-87	3	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5	HP301	TWR-16572	STS 61-B (SRM-23) Nozzle Component Postflight Evaluation Report	07-01-87	3	U
3-5	HQ102	TWR-16584 Rev D	RSRM Flap Termination Structural Integrity	08/18/88	3	U
3-5	HP301	TWR-16604 Rev A	Launch Pad Natural Environments for Global Thermal Analysis	01-27-88	3	U
3-5	FN301	TWR-16611	SRM Filament Wound Case Refurbishment Investigation Final Report	04-29-87	3	U
3-5	HQ301	TWR-16648	ETM-1A Aft Joint Rationale,	05-14-87	3	U
3-5	HQ301	TWR-16662	Retention of Joint Putty for the Modified Ignition System		3	U
3-5	HQ301	TWR-16668	Evaluation of Composite Stiffening Rings on the Forward and Center Field Joints of ETM-1A	05-22-87	3	U
3-5	HQ301	TWR-16674 Rev D	Test Article Mechanical Loads TPTA, Pathfinder, and QM-7 (T-97 Test Stand)	08/12/88	3	U
3-5	HQ301	TWR-16682 Rev A	O-Ring Squeeze Calculations for the RSRM	09-10-87	3	U
3-5	FN301	TWR-16687	Space Shuttle SRM Filament Wound Case Empty Segment on 35-Degree End Chocks	07-10-87	3	U
3-5	HQ301	TWR-16719 Rev H	Design Compliance Report ICD-2-00001 Revision H, Shuttle Lines and Protuberances	11-01-87	3	U
3-5	HQ301	TWR-16736-2	RSRML and SPML Weight Comparison for the Space Shuttle SRM		3	U
3-5	HQ301	TWR-16736-3	RSRML and HPML Weight Comparison for the Space Shuttle SRM	03-05-88	3	U
3-5	HQ301	TWR-16736-4	RSRML and HPML Weight Comparison for the Space Shuttle SRM	06-05-88	3	U
3-5	HQ301	TWR-16739	Thermal Environments, Morton Thiokol Space Operations to Kennedy Space Center and Vandenberg Air Force Base	06-15-88	3	U
3-5	HQ301	TWR-16766	External Flow and Thermal Fields Around the Space Shuttle on the Launch Pad		3	U
3-5	HQ301	TWR-16767	Final Report for Space Shuttle SRM Safety and Arming Device Clutch Disk Material Evaluation Test	07-01-87	3	U
3-5	HQ301	TWR-16801	RSRM Design Loads Data Book	04-05-88	3	U
3-5	HQ301	TWR-16803	Procedure for Adjusting Nozzle Post-Flight Test Chart to End of Action Time Char Thickness	11-02-87	3	U
3-5	HQ301	TWR-16808	ETM-1A Postfire Inspection Report	07-23-87	3	U
3-5	HQ301	TWR-16813	RSRM Case Line Loads	05-16-88	3	U
3-5	HQ301	TWR-16839	Stress Analysis for 7U75170 Field Joint	04-20-88	3	U
3-5	HQ301	TWR-16842	Modeling Procedure of Finding Energy Release Rate Using Crack Closure Integral Method		3	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5		TWR-16861 Rev D	RSRM Master Matrix	09/23/88	3	U
3-5	HQ301	TWR-16877 Rev C	Redesigned Shuttle Rocket Motor Mass Properties Uncertainty Analysis	12/14/88	3	U
3-5	HQ301	TWR-16889	Net Molding Grain Deflection Analysis	12-18-87	3	U
3-5	HQ301	TWR-16911	SRM Case Pitting Studies Final Report	03-15-88	3	U
3-5	HQ301	TWR-16928	Predicted Ballistic Performance Characteristics	11-14-87	3	U
3-5	HQ301	TWR-16933-2	Final Report SRM Case Surface Preparation	02-01-88	3	U
3-5	HQ301	TWR-16940 Rev B	RSRM Ballistics Performance Assessment	05-19-88	3	U
3-5	HQ102	TWR-16948 Rev A	Loads for Use in PLI Structural Analysis	08/01/88	3	U
3-5	HQ301	TWR-16952	Interim Factory Joint Resiliency Testing Report	08-18-87	3	U
3-5	HQ301	TWR-16953	Nitrile Butadiene Rubber (NBR)/Glass Cloth Phenolics Wiper O-Ring Sealing Ability	04-05-88	3	U
3-5	HQ301	TWR-16961 Rev B	RSRM Propellant/Liner/Insulation Structural Analysis Summary	01/15/89	3	U
3-5	HQ301	TWR-16980	Summary of Strural Analysis on SRM Aluminum	10-16-88	3	U
3-5	HQ301	TWR-16988	First Flight RSRM O-Ring Squeeze Calculations		3	U
3-5	1.1.2.1.1	TWR-16995	Structural - Field Joint Separation Fixture (DWG-8U75676)	06/25/88	3	U
3-5	HQ301	TWR-16998 Rev A	Grain Structural Analysis Verification Plan	04-01-88	3	U
3-5	HQ301	TWR-17009 Rev A	Global Thermal Environment Analysis	04-01-88	3	U
3-5	HQ301	TWR-17015 Rev A	Case Field Joint Redesign Flow/Thermal Analysis	03-16-88	3	U
3-5	HQ301	TWR-17016 Rev A	Flight Readiness Firing (FRF) Instrumentation Listing	11-23-88	3	U
3-5	HQ301	TWR-17029	Flow-Thermal Analysis of the SRM Bonded Nozzle Joint and Aft Dome Flow Field Report (7MD021)	06-07-88	3	U
3-5	HQ301	TWR-17031 Rev A	O-Ring 2: Volume Filling and O-Ring Erosion Prediction Code with Improved Model Descriptions and Validation Part II - Improved Volume Villing Model and Code Validation	11-25-87	3	U
3-5	HQ301	TWR-17033	Flow/Thermal of the On-Pad SRB Aft Skirt Conditioning System	03-25-88	3	U
3-5	HQ301	TWR-17034	Critical Single Leak Path, Case Field Joint	04-25-88	3	U
3-5	HQ301	TWR-17036 Rev B	RSRM Factory Joint Insulation and Propellant Grain Structural Integrity Analysis	Sept 88	3	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5	HQ301	TWR-17037 Rev B	Nozzle Joint Insulation Structural Analysis	03/03/89	3	U
3-5	HQ301	TWR-17052	ATA Propellant/Insulation Structural Analysis		3	U
3-5	HQ301	TWR-17055	DM-8 Postfire Disassembly Insulation Component Evaluation Interim Report		3	U
3-5	HQ301	TWR-17056	DM-8 Postfire Joint Disassembly Case/Seal Component Interim Report	09-18-87	3	U
3-5	HQ301	TWR-17057 Rev B	Propellant Grain - Propellant, Liner, Insulation and Inhibitor Structural Integrity	09/23/88	3	U
3-5	HQ301	TWR-17063 Rev A	Thermal Evaluation of Developmental Flight Instrumentation	03-21-88	3	U
3-5	HQ301	TWR-17068	Metal Finish and Development of Acceptance Criteria for SRM Joint Seals	09-14-87	3	U
3-5	HQ301	TWR-17077 Rev A	O-Ring Geometric Characterization Footprint	08-01-88	3	U
3-5	HQ301	TWR-17078	Radial Bolt Stat-O-Seal Leak Test Report	12-08-87	3	U
3-5	HQ301	TWR-17082	RSRM CDR Summary Report, Seal Design	12-21-87	3	U
3-5	HQ301	TWR-17092 Rev A	Stress Analysis of 8U75686 Field Joint Assembly Fixture (FJAF)	April 1989	3	U
3-5	HQ301	TWR-17105 Rev A	Results of Studies on the Identity/Development an Alternate Grease	07-26-88	3	U
3-5	HQ301	TWR-17110 Rev B	Vertical RSRM Operation Procedure for the 8U75686 Field Joint Assembly Fixture Installation and Removal	04/12/89	3	U
3-5	HQ301	TWR-17113 Rev A	Aero/Thermal Analysis Verification Results (ANV-23)	03/31/88	3	U
3-5	HQ301	TWR-17118 Rev A	RSRM Case Structural Analysis Basic: Summary Supp A: Factory Joint Supp B: Field Joint Supp C: Dome-to-Cylinder Joints Supp D: Case/Nozzle Joint Supp E: Stiffener Segments, Buckling, and Pin Retainer Band Supp F: ET Attach	03-30-88	3	U
3-5	HQ301	TWR-17127 Rev A	Structural Analysis of the Accelerometer Mounting Block for the First RSRM Flight	04-04-88	3	U
3-5	HQ301	TWR-17127 Rev B	Structural Analysis of the Accelerometer Mounting Block for the First RSRM Flight	11/04/88	3	U
3-5	HQ301	TWR-17140	Task Force Report in the SRM Ultimate Strength and Useful Life	09-25-87	3	U
3-5	HQ301	TWR-17155	Stat-O-Seal Damage at the Radial Bolts	05-14-88	3	U
3-5	HQ301	TWR-17169	Structural Analysis and Testing of the RSRM Field Joint Protection System	11-25-87	3	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5	HQ301	TWR-17187	Elastic-Plastic Analysis of Space Shuttle Solid Rocket Motor Flight 51L Configuration Case Joint	11-30-87	3	U
3-5	HQ301	TWR-17204 Rev J	Level II Requirements vs. CPW1-3600 Requirements	10/19/89	3	U
3-5	HQ301	TWR-17209	DM-9 O-Ring Squeeze Calculations and Shim Sizing	10-21-87	3	U
3-5	HQ301	TWR-17210	Effect of Grease Coating Thickness on Corrosion Protection of D6AC Steel		3	U
3-5	HQ301	TWR-17216	Aero/Thermal Analysis of the RSRM Nozzle		3	U
3-5	HQ301	TWR-17216 Vol I	STA-3 Stress Analysis Global Finite Element Analysis of Entire Configuration Margins of Safety in Case Membrane Regions	12-20-87	3	U
3-5	HQ301	TWR-17219 Rev A	Aero/Thermal Analysis of the RSRM Nozzle	04-05-88	3	U
3-5	HQ301	TWR-17221 Rev A	Thermal Response of Nozzle Exit Cone and LSC Assembly External Surfaces Due to External Heating	04-07-88	3	U
3-5	HQ301	TWR-17250	Nozzle Centerline Radial Offset Due to Manufacturing Tolerances	11-06-87	3	U
3-5	HQ301	TWR-17251 Rev A	Installation Checkout and Acceptance Criteria RSRM Flight 1 Instrumentation	06-15-88	3	U
3-5	HQ301	TWR-17253	Summary of Electrical Analysis on SRM Field Joint Protection System	12-15-87	3	U
3-5	HQ301	TWR-17265 Rev B	Ignition System Structural Analysis	Nov 88	3	U
3-5	HQ301	TWR-17266	DM-8 Postfire Disassembly Igniter Component Evaluation Interim Report	11-09-87	3	U
3-5		TWR-17268 Vol 1	DM-8 Postfire Hardware Evaluation Final Report System Overview	09/17/88	3	U
3-5	1.1.1.3.1	TWR-17269 Vol 1	DM-9 Postfire Hardware Evaluation Final Report System Overview	10/03/88	3	U
3-5	HQ302	TWR-17269 Vol 5	DM-9 Post-Test Nozzle Performance Evaluation Report	July 88	3	U
3-5		TWR-17270 Vol 4	QM-6 Performance Evaluation Report (Seals)	07/27/88	3	U
3-5	48102	TWR-17272 Vol 3 Rev A	STS-26 Insulation Component FEWG Final Report, Final Release	April 1989	3	U
3-5	HQ301	TWR-17273 Rev A	Cable Bracket Bonds Structural Analysis	04-01-88	3	U
3-5	HQ301	TWR-17303	Design Certification Review Plan, Redesigned Solid Rocket Motor	01-06-88	3	U
3-5	HQ301	TWR-17306	RSRM First Flight Aft Dome Insulation Unbond Structural Integrity Analysis	12-08-87	3	U
3-5	HQ301	TWR-17310 Rev A	Space Shuttle RSRM Safety and Arming Device Requirements Compliance Summary	Apr 88	3	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5	HQ301	TWR-17316	Qualification of New Sources of Sodium Chlorate for Ammonium Perchlorate	10-13-87	3	U
3-5	HQ301	TWR-17317	CEI Compliance Report, RSRM Nozzle	11-20-87	3	U
3-5	HQ301	TWR-17317	CEI Compliance Report, RSRM Nozzle	11-20-87	3	U
3-5	HQ301	TWR-17323 Rev A	Thermal Response of the Redesigned Solid Rocket Motor Center Segment to the Transportation Environment During Shipment from Thiokol Space Operations to KSC	08/20/89	3	U
3-5	HQ301	TWR-17365	Actuator Length Adjustment for QM-6	12-31-87	3	U
3-5	HQ301	TWR-17370	Boot Ring Material Characterization for RSRM Nozzle	11-25-87	3	U
3-5	HQ301	TWR-17406	Evaluation of Radial Bolt Material Property Effects on the RSRM Nozzle-to-Case Joint Behavior	01-07-88	3	U
3-5	HQ301	TWR-17413	Flow/Thermal Analysis of the SRM Aft Skirt Conditioning at the T-24 Test Bay		3	U
3-5	HQ301	TWR-17416	SRB Aft Skirt Hot Gas Purge Analysis	Mar 88	3	U
3-5	HQ301	TWR-17418	Space Shuttle SRM Joint Addendum to Heater Power Density Analysis Tacy Part #266-4664	11-11-87	3	U
3-5	HQ301	TWR-17497 Rev A	Glass Beading Metal O-Ring Sealing Surfaces (Refurbishment Technique) a Sealability Study	Jun 88	3	U
3-5	H8102	TWR-17528	Similarity Analysis for DFI/OFI/OEI Final Report	08/23/88	3	U
3-5	48102	TWR-17528 Rev A	Similarity Analysis for DFI/OFI/OEI Final Report	12/16/88	3	U
3-5	48601	TWR-17535	MTI Engineering Requirements Documents for RSRM First Flight	09/27/88	3	U
3-5	HQ301	TWR-17560	Systems Tunnel Paint Stripping Evaluation	05/15/88	3	U
3-5	HQ301	TWR-17572	Interim Performance Evaluation Report, Volume 3, Insulation Component	06-15-88	3	U
3-5	HQ302	TWR-17575 Vol 3	QM-7 Interim Performance Evaluation Report Insulation Component	07/11/88	3	U
3-5	HQ302	TWR-17592 Vol 10	Space Shuttle Production Verification Motor (PV-1) Static Test Aero/Thermal Component Interim Release	09/15/88	3	U
3-5	HQ302	TWR-17592 Vol 11	PVM-1 Final Report Ballistics/Mass Properties	09/22/88	3	U
3-5	HQ302	TWR-17592 Vol 5 Rev A	PV-1 Post-Test Nozzle Performance Evaluation Report	May 1989	3	U
3-5	HQ301	TWR-17598	Development Motor No. 8 (DM-8) Nozzle Post-Test Evaluation Report	Mar 88	3	U
3-5	HQ301	TWR-17716	RSRM Critical Design Review Summary Report, Systems Tunnel	11-09-87	3	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5	HQ301	TWR-17721	RSRM TP-H1178 Igniter Propellant Characterization Requirements	02-25-88	3	U
3-5	HQ301	TWR-17736	Nozzle Maximum Erosion Data and RSRM Liner Thickness		3	U
3-5	HQ301	TWR-17752	NJES-2A Fixed Nozzle Joint Friction Comparison Analysis	11-20-87	3	U
3-5	HQ301	TWR-17757 Rev A	Engineering Configuration Management Indentured Parts List	04-05-88	3	U
3-5	HQ301	TWR-17769 Rev B	SRB Field Joint Insulation Vertical Stacking Acceptance Criteria at KSC	03-02-88	3	U
3-5	HQ301	TWR-17770	NBR Aging Quality in SRM Insulated Segments	11-20-87	3	U
3-5	1.1.2.1.1	TWR-17778 Rev A	SRM Support Equipment Engineering Analysis for Rocket Segments Cover Assembly Redesign (Lightening Protection)	07/06/88	3	U
3-5	HQ301	TWR-17786	Test Results on the Sealability of O-Rings with Grinding Abrasions and Cuts	12-08-87	3	U
3-5	HQ301	TWR-17800	Space Shuttle Solid Rocket Motor Three-Dimensional Global Finite Element Model Description	09/01/88	3	U
3-5	HQ201	TWR-17800	Space Shuttle Solid Rocket Motor Three-Dimensional Global Finite Element Model Description	09/01/88	3	U
3-5	HQ301	TWR-17802	RSRM Insulation/Case Bond Verification Overview		3	U
3-5	HQ301	TWR-17804	Development of Static Test Duty Cycles for Test Bays T-24 and T-97 and for Motors ETM-1A, DM-8 and DM-9	Apr 88	3	U
3-5	HQ301	TWR-17814 Rev A	Examination of Anomalies Observed in Nozzle Shear Pins, Part No. 1U76065-01		3	U
3-5	HQ301	TWR-17847	Ultrasonic Investigation of Blend Area	01-05-88	3	U
3-5	HQ301	TWR-17865	Jar Structural Analysis of the RSRM Nozzle-to-Case Joint	03-31-88	3	U
3-5	HQ301	TWR-17873	Pre-Test Predictions for DM-9 Girth and and Strain Gages		3	U
3-5	HQ301	TWR-17884	Redundant and Verifiable Field and Nozzle- to-Case Joints Vent Port Plug Design Pressure and Leak Check Interim Report	03-21-88	3	U
3-5	HQ301	TWR-17908	SRLM Separation Cue Parameter Analysis		3	U
3-5	HQ301	TWR-17914	TPTA 1.2 Instrument List		3	U
3-5	HQ301	TWR-17942	Final Report on T-24 Static Test Stand Structural Analysis	01-05-88	3	U
3-5	HQ301	TWR-17943	Final Report on T-97 Dynamic Test Stand Structural Analysis	01-07-88	3	U
3-5	HQ301	TWR-17945	Final Report on T-24 Test Stand Modal Survey	01-08-88	3	U



PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5	HQ301	TWR-17956	Procedure for Problem Investigation of the DM-9 SRM S&A Device Test Failure	01-18-88	3	U
3-5	HQ301	TWR-17990	Nozzle Aft Exit Cone Axial and Radial Deflection at Motor Ignition	02-10-88	3	U
3-5	HQ301	TWR-17991 Rev A	RSRLM Seal Design Summary Report	09-01-88	3	U
3-5	HQ301	TWR-17994	STA-3 Test No. 3 Max Q, Aft ET Attach Structural Applications Initial Assessment Report	02-02-88	3	U
3-5	HQ301	TWR-18011 Rev A	RSRM Structural Material Properties Data Book Supp A: Metals Supp B: Propellant, Liner Insulation and Inhibitor	08-01-88	3	U
3-5	HQ301	TWR-18012	RSRM Propellant Grain Transportation Structural Integrity	04-01-88	3	U
3-5	HQ301	TWR-18014	Effect of Low Temperatures on Adhesives Used with Instrumentation at MSFC		3	U
3-5	HQ301	TWR-18015	RSRM Drawing Standards and Quality Audit	02-03-88	3	U
3-5	HQ301	TWR-18019	Consequence of SRM Outer Boot Ring Bondline Failure Thermal/Erosion Criticality Assessment	01-28-88	3	U
3-5	HQ301	TWR-18020 Rev A	TPTA 2.1 Instrument List	03-24-88	3	U
3-5	1.1.2.1.1	TWR-18030	Operating Procedure Nozzle Transportation Fixture	08/02/88	3	U
3-5	1.1.2.1.1	TWR-18030 Rev A	Operating Procedure Nozzle Transportation Fixture	10/31/88	3	U
3-5	HQ301	TWR-18031 Rev A	Heater Band Tensioning Tool Stress Analysis	Jun 88	3	U
3-5	1.1.2.1.1	TWR-18033	Structural Analysis Transportation Monitoring Unit	06/24/88	3	U
3-5	HQ301	TWR-18034	Nozzle Boot Cavity Pressurization	01-19-88	3	U
3-5	HQ301	TWR-18036	RSRM Nozzle Support, determining the Effect of Multiple Cure Cycles on Space Shuttle RSRM Aft Cone Liner Carbon Cloth Phenolic	02-09-88	3	U
3-5	HQ301	TWR-18037 Rev A	DM-9 Postfire Disassembly Insulation Component Evaluation Interim Report	06-27-88	3	U
3-5	HQ301	TWR-18046	RSRM-1 (STS-26) Burn Rates and Propellant Weights		3	U
3-5	HQ301	TWR-18048	Existence of Circumferential Flow in the RSRM Joints	02-09-88	3	U
3-5	HQ301	TWR-18052	Space Shuttle SRM Actuator Length Determination for QM-7	02-11-88	3	U
3-5	HQ301	TWR-18078	Three Dimensional Field Joint Separation Fixture-to-Case Finite Element Analysis	03-17-88	3	U
3-5	HQ301	TWR-18083	STS-61C (SRM-24) Nozzle Component Postflight Evaluation Report	01-01-88	3	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5	4B102	TWR-18088	Useful Life and Storage Effects Analysis for DFI/OFI/OEI Final Report	07/13/88	3	U
3-5	4B102	TWR-18089	Material and EEE Parts Selection Analysis for DFI/OFI/OEI Final Report	07/13/88	3	U
3-5	4B102	TWR-18091	Debris Prevention Analysis for DFI/OFI/OEI (STS-26 Configuration Only), Final Report	08/22/88	3	U
3-5	HQ301	TWR-18096	RSRM Field Joint insulation Sensitivity to Compression Set	02-22-88	3	U
3-5	HQ301	TWR-18099	RSRM Design Certification Review Summary, Systems Tunnel	04-15-88	3	U
3-5	HQ301	TWR-18102	Ignition System DCR Summary Report	11-11-87	3	U
3-5	HQ301	TWR-18103	RSRM Critical Design Review Summary Report Propellant and Liner Systems	04-11-88	3	U
3-5	HQ301	TWR-18107	DCR Volume-Seals and Leak Test	04-16-88	3	U
3-5	HQ301	TWR-18124	Shuttle SRM Field and Nozzle Case Joint Cold Flow Tests	02-25-88	3	U
3-5	HQ301	TWR-18126	Evaluation of Adhesives and Bondline Characterizations of SRM Nozzle Adhesives	02-26-88	3	U
3-5	HQ301	TWR-18127	Humidity and Debond Variation for Adhesive Characterizations of SRM Nozzle Adhesives	03-30-88	3	U
3-5	HQ301	TWR-18133 Rev A	RSRM Internal Insulation Design Summary	09/01/88	3	U
3-5	HQ301	TWR-18136 Rev b	RSRM Field Joint Protection System Structural Analysis and Component Testing	April 1989	3	U
3-5	HQ301	TWR-18146 Rev A	Procedure for the Investigation of Out of Specification Cycling of Arming Monitor Assemblies	10/20/88	3	U
3-5	HQ301	TWR-18147 Rev A	Space Shuttle RSRM Safety and Arming Device Global Analysis	Oct 88	3	U
3-5	HQ301	TWR-18157	Space Shuttle RSRM Safety and Arming Device Similarity Analysis	03-01-88	3	U
3-5	HQ301	TWR-18161	RSRM-1A Aft Center Segment Flap Bulb Insulation Voids	03-08-88	3	U
3-5	HQ301	TWR-18171	Thermal Analysis of O-Ring Leak in the Case/Nozzle Joint	03-08-88	3	U
3-5	HQ301	TWR-18176	Predicted Ballistic performance Characteristics for QM-6	03-14-88	3	U
3-5	HQ301	TWR-18183	Required Morton Thiokol Computer Displays at Marshall Space Flight Center	03-23-88	3	U
3-5	HQ301	TWR-18190	Sinda Model Verification	03-15-88	3	U
3-5	HQ301	TWR-18196	Space Shuttle RSRM DM-8 Dynamic Data Evaluation and Analysis	03-17-88	3	U
3-5	HQ301	TWR-18204	RSRM Nozzle/Case Joint Circumferential Flow Probability Analysis	Apr 88	3	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5	HQ201	TWR-18211	Performing Advanced Mode Acceleration Transient Analysis Using the Micropathfinder Superelement Model	08/01/88	3	U
3-5	HQ201	TWR-18212	Predicted Structural Behavior of the RSRB Due to FRF and Liftoff Loading Conditions Using the Launch Configuration RSRB Global Model	09/01/88	3	U
3-5	HQ201	TWR-18213	Comparison of Line Load and Accelerations Between Rockwell Liftoff Model and MTI Global Model	08/31/88	3	U
3-5	HQ301	TWR-18218	Replacement of EPDM with K5NA on Stiffener Stubs	04-01-88	3	U
3-5	HQ301	TWR-18220 Rev A	TPTA 2.2 Instrument List	05-04-88	3	U
3-5	HQ301	TWR-18225 Rev A	Long-Term Blow-By Test Report	Jan 89	3	U
3-5	HQ301	TWR-18229	Bonding Contamination Study	03-15-88	3	U
3-5	HQ301	TWR-18233	Similarity Analysis for Propellant/Liner	Apr 88	3	U
3-5	HQ301	TWR-18235 Rev A	Environmental Requirements Status	08/15/89	3	U
3-5	HQ301	TWR-18237	Assessment of Density Variations Identified on the X-Ray Film in the stress relief Flap Region of the RSRM-2B Aft Center Segment	04-01-88	3	U
3-5	HQ301	TWR-18243	Custom Vent Port Plug Selection for 360L001, TPTA 2.2 and QM-7	01/06/88	3	U
3-5		TWR-18243 Rev A	Custom Vent Port Selection for 360L001, TPTA 2.2, and QM-7	09/01/88	3	U
3-5	HQ301	TWR-18245	RSRM Thrust Imbalance Study for Time Interval Between Mched Cast Segments	04-08-88	3	U
3-5	HQ301	TWR-18247	Aft Segment Propellant Grain Structural Integrity with a Low Strain Capability Mix, (Discrepancy Report No. 154325)	04-08-88	3	U
3-5	HQ301	TWR-18250	Igniter Seals Thermal Environment Analysis	03-31-88	3	U
3-5	HQ301	TWR-18251	Leak Testing Case-to-Nozzle Joint PVM-1 (FTTM-L)			
3-5	HQ301	TWR-18259	Silane Primer Process Variable Study	04/22/88	3	U
3-5	HQ301	TWR-18260	Space Shuttle SRM Project SRM Statistical Analysis of Glass Phenolic Cloth	03-28-88	3	U
3-5	HQ301	TWR-18289	Transmittal of T-97 Modal Characteristics with Burn Time	04-13-88	3	U
3-5	HQ301	TWR-18291	Validation of the T-97 Test Stand and Solid Rocket Motor Finite Element Model	04-11-88	3	U
3-5	HQ301	TWR-18292	An Independent Review of Chamber Pressure Predictions for RSRM	06-20-88	3	U
3-5	HQ301	TWR-18295	Three-Dimensional Study of the Venting of the Gaseous Vapors at the Top of the External Tank of the Space Shuttle on the Launch	04-12-88	3	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5	HQ301	TWR-18312 Rev A	RSRM Field Joint Temperature Launch Commit Criteria Redline Derivation Justification	10/28/88	3	U
3-5	HQ301	TWR-18315	Determination of Boltmaster Error When Measuring Nozzle Bolts	05-06-88	3	U
3-5	HQ102	TWR-18317	NTA Program Component Process Evaluation, Understanding Pocketing Erosion in SRM Nozzles	09/01/88	3	U
3-5	HQ102	TWR-18320	Nozzle Technology Advancement Program Nozzle DR Study	05/21/88	3	U
3-5	HQ301	TWR-18334	STA-3 Test 6 Prelaunch (SSME Buildup) Structural Applications Initial Assessment Report	04-28-88	3	U
3-5	HQ301	TWR-18334	STA-3 Test 6 Prelaunch (SSME Buildup) Structural Applications Initial Assessment Report	04-28-88	3	U
3-5	HQ301	TWR-18339	Review of QM-6 Nozzle Phenolic Component Radiographic Film Audit	04-19-88	3	U
3-5	HQ301	TWR-18349	Manual Rework on D6AC Steel Sealing Surfaces	Jun 88	3	U
3-5	HQ301	TWR-18350	Correlation of the T-97 Finite Element Model to RM-1 Side Load Check-out Test Results	05-16-88	3	U
3-5	HQ301	TWR-18354 Rev A	RSRM Ignition System Seal Squeeze Analysis	01 20 89	3	U
3-5	HQ301	TWR-18357	RSRM Material Property Testing Summary of Needs	Apr 88	3	U
3-5	HQ301	TWR-18360	Continuous Process Requirements on Kerr-McGee Ammonium Perchlorate	03-29-88	3	U
3-5		TWR-18361	Fracture Mechanics Analysis of 8U75686 Field Joint Assembly Fixture	07/04/88	3	U
3-5	HQ301	TWR-18362 Rev B	Critical Item Risk Assessment (CIRA) for the RSRL FMEA/CIL	09/29/88	3	U
3-5	HQ301	TWR-18369	Space Shuttle RSRM DM-9 Dynamic Data Evaluation and Analysis	05-03-88	3	U
3-5	HQ301	TWR-18372	Inspection of the Sealing Surfaces on O-Ring Grooves for Nozzle Joints	05-05-88	3	U
3-5	HQ301	TWR-18374	Similarity Analysis for RSRM Joint Protection System	05/06/88	3	U
3-5	HQ301	TWR-18384	Pressure Oscillations in Space Shuttle Static Test Motors ETM-1A, DM-8, and DM-9	Apr 88	3	U
3-5	HQ301	TWR-18390	Thermostructural Analysis Verification Phase I Interim Report Tensile Testing	06-24-88	3	U
3-5	HQ301	TWR-18391 Rev A	TPTA 1.3 Instrument List	08-31-88	3	U
3-5	HQ301	TWR-18397	SRM Alternate Source Evaluation of Cork Insulation	06/29/88	3	U
3-5	HQ202	TWR-18412	EMI Analysis Igniter and Safe and Arm Device Heaters	08/30/88	3	U
3-5	HQ301	TWR-18418	Predicted Ballistic Performance Characteristics for QM-7	05-25-88	3	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5	HQ301	TWR-18430	Phosphoric Acid Anodization Facility Study	06-07-88	3	U
3-5	48102	TWR-18440	RTV Cure Study	08/12/88	3	U
3-5	48601	TWR-18442 Rev A	MTI Engineering Requirements Document for Flight Readiness Firing (FRF)	May 1989	3	U
3-5	HQ301	TWR-18445	Contamination Removal Using Various Solvents and Methodologies	Jun 88	3	U
3-5	HQ301	TWR-18450 Rev A	Similarity Analysis for RSRM Aluminum Systems Tunnel	05-06-88	3	U
3-5	HQ301	TWR-18458	Analysis of Radiographic Low Density Indications in the Material Interfaces of RSRM Nozzle Phenolic Insulators	Jun 88	3	U
3-5		TWR-18466	Evaluation of Free Acid Determination in HB Polymer	05/11/88	3	U
3-5	HQ301	TWR-18479	A Check of Axisymmetric Assumptions Using 3-D Model and Time Consistent Loads	06-03-88	3	U
3-5		TWR-18508	Space Shuttle RSRM QM-6 Dynamic Data Evaluation in the T-24 Test Stand and Comparison to DM-8 and DM-9, A Summary Report	06/28/88	3	U
3-5	48102	TWR-18525	Global Analysis for DF1/OF1/OE1 Final Report	07/13/88	3	U
3-5	HQ301	TWR-18527	Development Flight Instrumentation Adhesive Bond Acceptance Test	06-23-88	3	U
3-5	81101	TWR-18529	RSRM Nozzle Zero Bolt Preload Analysis and No Bolt Analysis	10/12/88	3	U
3-5	HQ302	TWR-18548	The Need for Propellant Extraction from Production Motors	09/16/88	3	U
3-5		TWR-18552	The Effect of Screen Size on AP Particle Size and RSRM Ignition Transient Analysis	07/22/88	3	U
3-5		TWR-18555	Helical Coil Insert Study Final Report	11/07/88	3	U
3-5		TWR-18561	Report for Vent Port Mechanical Measurement Tools	07/19/88	3	U
3-5	48102	TWR-18563	Design and Analysis of the Load Simulation Tool for the Evaluation of Insulation Edge Separation Growth	08/26/88	3	U
3-5		TWR-18565	Actuation System Failure Analysis of T-97 Test Stand for QM-7 Static Fire	07/01/88	3	U
3-5	HQ301	TWR-18566-1	Quarterly Trend Analysis Team Report	06-23-88	3	U
3-5		TWR-18567	Three-Dimensional Plasticity Analysis of RSRM Nozzle Joint 5 at 1.4 X MEOP	06/24/88	3	U
3-5		TWR-18575 Rev A	Predicted Ballistic Performance Characteristics for PVM-1	07/06/88	3	U
3-5		TWR-18577 Rev A	Redesigned Solid Rocket Motor 360L001 Seal Leak Test Results	10/01/88	3	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5	HQ301	TWR-18578	RSRM Stiffener Ring Insulation Structural Analysis	09/04/88	3	U
3-5	HQ302	TWR-18583	RM-1 Side Load Checkout Analysis	08/03/88	3	U
3-5	HQ302	TWR-18583 Rev A	RM-1 Side Load Checkout Analysis	08/29/88	3	U
3-5		TWR-18611	MSFC Specification 445 and Contract Change Order 966/972 Overview, Compliance and Implementation	08/01/88	3	U
3-5	HQ301	TWR-18614	Investigation Report on Installation Procedure of Stat-O-Seals and Bolts with Molykote and HD-2 Grease Applied	07/12/88	3	U
3-5	HQ301	TWR-18617	Space Shuttle RSRM Assembled Motor Similarity Analysis	12/01/88	3	U
3-5	48102	TWR-18619	Laboratory Evaluation of the Chemical Stability of HD-2 Grease	11/01/88	3	U
3-5	HQ301	TWR-18621 Rev A	RSRM-2 (STS-27R) Burn Rates and Propellant Weights	10/07/88	3	U
3-5		TWR-18628	Evaluation of West Wipes, Anticon 100, S/N 57-856060, aka Polywipes	11/01/88	3	U
3-5		TWR-18629	PV-1 RSRM O-Ring Squeeze Calculations	07/11/88	3	U
3-5		TWR-18646	Round Robin Sieve Calibration and AP Particle Size Analysis	07/05/88	3	U
3-5		TWR-18648 Rev A	Influence of Layup Quality on New Flap Insulation Layup Area	May 1989	3	U
3-5	HQ301	TWR-18661	Improved Vacuum Bag Breather Systems for SRM Case Insulation Interim Report	11/01/88	3	U
3-5	HQ301	TWR-18668	DM-9 Outer Boot Ring Anomaly Investigation: Results of Manufacturing and Quality Assurance Review	10/01/88	3	U
3-5	1.4.2.3.2	TWR-18678	Maximum Nozzle Moment of Inertia Analysis	06/22/88	3	U
3-5	HQ301	TWR-18682	A Study on the Effects of Processing Standardization and Verification Propellant Mixes Concurrently	07/15/88	3	U
3-5	HQ405	TWR-18709	Stress Analysis, Vent Port Plug Installation Tool	09/01/88	3	U
3-5	48101	TWR-18724	Space Shuttle SRM CEI Specification Ballistics Assessment	08/04/88	3	U
3-5	48102	TWR-18730	STS-26 Seal Temperature Requirements	08/25/88	3	U
3-5		TWR-18735	The Study of Two-Dimension to Three-Dimension Transitions in Finite Element Models	08/08/88	3	U
3-5		TWR-18737	Resin Content Analysis by Ultrasonic Resin Analyzer: An Alternate to Standard Destructive Test Methods	07/01/88	3	U
3-5		TWR-18746	RSRM Case Segment Clevis Blind Hole Machining Undercut Structural	08/08/88	3	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5		TWR-18746 Rev A	RSRM Case Segment Clevis Blind Hole Machining Undercut Structural Analysis	09/02/88	3	U
3-5		TWR-18746 Rev B	RSRM Case Segment Clevis Blind Hole Machining Undercut Structural Analysis	09/07/88	3	U
3-5	HQ601	TWR-18750 Rev A	SRM Technical Evaluation Motor Alignment and Measurement	04 19 89	3	U
3-5	4B102	TWR-18758	O-Ring Squeeze Calculations and Temperature Requirements 360L002	10/31/88	3	U
3-5		TWR-18766	Predicted Ballistic Performance Characteristics for RSRM-1	08/29/88	3	U
3-5		TWR-18772	Custom Vent Port Plug Selection for 360L-002, 003, and 004	09/27/88	3	U
3-5	4B102	TWR-18791	RSRM Field Joint Volume No. (V4) Pressurization Analysis	09/27/88	3	U
3-5		TWR-18809	Post Test Correlation of the T-97 ET Actuation/Control System Model for the QM-7 Static Test Results	09/01/88	3	U
3-5	HQ301	TWR-18810	Fixed Link Length for TEM-1	10/03/88	3	U
3-5	4B102	TWR-18811	O-Ring Calculations and Temperature Requirements QM-8	11/30/88	3	U
3-5	4B102	TWR-18813	RSRM Instrument List - STS-27	10/05/88	3	U
3-5	4B102	TWR-18814 Rev A	RSRM Flight 3 Instrumentation List	12/22/88	3	U
3-5		TWR-18817	Report on Suspect Fasteners from Lawrence Engineering Supply used in the RSRM S&A Device	10/01/88	3	U
3-5		TWR-18818	Assessment of High Ultrasonic Signals in the Clevis Region of the Solid Rocket Motor	10/01/88	3	U
3-5	HQ302	TWR-18857	Investigation of the T-97 RSRM Model Ring-Down Discrepancy	10/28/88	3	U
3-5	4B102	TWR-18879 Rev B	Removal of Cork Lid over DFI and GEI Instrumentation Cables	02/24/89	3	U
3-5	4B601	TWR-18891	Morton Thiokol, Inc. Engineering Requirements Document for RSRM Second Flight	11/18/88	3	U
3-5	4B601	TWR-18893	Case Acreage Ground Equipment Instrumentation Launch Commit Criteria Justification	11/16/88	3	U
3-5	4B601	TWR-18941	RSRM-4 Thrust Imbalance Using QM-8 Aft Segment	11/22/88	3	U
3-5		TWR-18942	Structural Integrity of the Flapbulb in the Center/Forward Segment (DR 173094)	11/30/88	3	U
3-5	1.4.2.3.2	TWR-18963	Recommendation to Eliminate RSRM CG Measurements	11/30/88	3	U
3-5	1.4.2.2.2	TWR-22302	Minuteman III Third Stage Rocket Motor Reliability Assessment, Analysis, and Apportionment Report (Applicable to Space Shuttle SRM Certification Requirements Document, TWR-12696, DF 4-20)	Sep 79	3	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-5	NO-NUMBER	TWR-25215	SRM Heads Up Launch Propellant Grain Safety Factors	08-12-85	3	U
3-5	HP	TWR-28793 Rev A	Forward Segment Inspection and Repair Criteria	02-25-88	3	U
3-5	HQ301	TWR-40103	Burn Rate and Mechanical Properties Data for the Space Shuttle RSRM-1	Feb 88	3	U
3-5	4B102	TWR-19017	Vertical Disassembly Fixture (H77-0451) Verification Analysis	Feb 1989	3	U
3-5	4B601	TWR-19126	Predicted Ballistic Performance Characteristics for 360Q004A/360H004B (RSRM-4)	02/27/89	3	U
3-5	4B201	TWR-19199	Engineering Support DR 172837 Fixed Housings	02/14/89	3	U
3-5	4B102	TWR-19016	RSRM Joint Heater Band Tensioner Tool Kit (H77-0476) Verification Analysis	Feb 1989	3	U
3-5	4B102	TWR-19022	Nozzle Transportation Fixture (H77-0460) Verification Analysis	Feb 1989	3	U
3-5	4B102	TWR-19019	Vent Port Plug Leak Test System (C77-0495) Verification Analysis	Feb 1989	3	U
3-7	1.4.2.3	TWR-10256 Rev A	Design Data Book for Space Shuttle SRM	11-01-76	2	U
3-7	FN301	TWR-14929	Design Data Book for Space Shuttle Filament Wound Case Solid Rocket Motor	06-10-85	2	U
3-7	FN301	TWR-17136	Design Data Book Space Shuttle Filament Wound Composite Case Section	10-05-87	3	U
4-1	1.4.2.2.2	TWR-10426 Rev B	Risk Management Summary for Space Shuttle SRM Project	04-01-77	2	U
4-10	1.4.2.2.2	TWR-10288-09	Parts List and Parts Usage for Space Shuttle SRM Project	10/24/76	2	U
4-14	1.4.2.2.2	TWR-11187-148	SRM Problem Summary	07/25/89	2	U
4-15	1.4.2.2.2	TWR-11347-2	Interface Problem Report (21 Day) Forward Case Segment Skirt Holes Nonconforming	05/16/77	2	U
4-15	1.4.2.2.2	TWR-11361-2	Interface Problem Report (21 Day) Forward Case Segment Skirt to Tang Runout	05/16/77	2	U
4-15	1.4.2.2.2	TWR-11363-2	Interface Problem Report (21 Day) Attach Case Segment ET Attach Stub Holes Nonconforming	06/20/77	2	U
4-15	1.4.2.2.2	TWR-11369-2	Interface Problem Report (21 Day) Forward Case Segment Skirt Holes	06/20/77	2	U
4-15	1.4.2.2.2	TWR-11372-2	Interface Problem Report (21 Day) Forward Case Segment Skirt to Wye Clearance Nonconforming	04/27/77	2	U
4-15	1.4.2.2.2	TWR-11401-2	Interface Problem Report (21 Day) Aft Case Segment Skirt to Wye Clearance Nonconforming	05/25/77	2	U
4-15	1.4.2.2.2	TWR-11420-1	Interface Problem Report (21 Day) Forward Case Segment Dome Exceeds Interface Envelope	06/30/77	2	U



PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
4-15	1.4.2.2.2	TWR-11422	Interface Problem Report Aft Case Segment Dome Exceeds Interface Envelope and Skirt Surface Finish Nonconforming	04/12/77	2	U
4-15	1.4.2.2.2	TWR-11423-1	Interface Problem Report (21 Day) Aft Case Segment Skirt Surface Finish Nonconforming	05/25/77	2	U
4-15	1.4.2.2.2	TWR-13897	SRM Interface Problem Report, 4-15/10, Nonconforming Forward Stub Skirt Hole Pattern (18 Additional Load Bearing Holes from 253 Deg to 287 Deg) 5-Day Report	07/11/83	2	U
4-15	1.4.2.2.2	TWR-13897-1	SRM Interface Problem Report, 4-15/10 Report, Nonconforming Forward Sub Skirt Holes Pattern (18 Additional Load Bearing Holes from 253 Deg to 287 Deg)	Aug 83	2	U
4-16	1.4.2.2.2	TWR-12863	Hazards Identification Report, 4-16/01, SRM Snubbed Nozzle Hazards During Recovery Operations	11/17/80	2	U
4-16	HQ	TWR-18355	Hazard Notification 4-14-88 Initial Report 8U50934-05 SRM Segments Railcar Covers	04/18/88	2	U
4-2	1.4.2.2.2	TWR-10161 Rev E	Quality Plan (Approved)	12-31-85	1	U
4-2	1.4.2.2.2	TWR-10162 Rev F	Reliability Plan for Space Shuttle Solid Rocket Motor Project	01/17/89	1	U
4-2	1.4.2.2.2	TWR-10163 Rev E	Safety Plan (Approved)	Jun 85	1	U
4-20	1.4.2.2.2	TWR-12696	Space Shuttle Solid Rocket Motor Certification Requirements Document Status Report	05/09/80	2	U
4-20	1.1.1.2	TWR-14408	Space Shuttle Solid Rocket Motor Certification Requirements Document Status Report	Mar 85	2	U
4-20	1.1.1.2	TWR-14408-25	Status Report for SRM L025	12/16/85	2	U
4-20	1.1.1.2	TWR-14408/18	Status Report for SRM M018	04/23/85	2	U
4-20	1.1.1.2	TWR-14408/19	Status Report for SRM M019	06/18/85	2	U
4-20	1.1.1.2	TWR-14408/21	Status Report for SRM L021	11/25/85	2	U
4-20	1.1.1.2	TWR-14408/22	Status Report for SRM L022	10/24/85	2	U
4-20	1.1.1.2	TWR-14408/24	Status Report for SRM L024	11/20/85	2	U
4-23	1.1.1.2	TWR-14637	KSC SRM Postflight Hardware Inspection Report for STS-41G	10/17/84	2	U
4-23	1.1.1.2	TWR-14703-2	SRM Postflight Hardware Inspection Report for STS-51A Part 2 of 2 Parts, Clearfield Inspection	01/14/85	2	U
4-23	1.1.1.2	TWR-14749	SRM Postflight Hardware Inspection Report for STS-41G, Clearfield Inspection	01/14/85	2	U
4-23	1.1.1.2	TWR-14761	SRM Postflight Hardware Inspection Report for STS-41D, Clearfield Inspection	01/15/85	2	U
4-23	1.1.1.2	TWR-14799-1	SRM Postflight Hardware Inspection Report for STS-15, Part 1 and 2 Parts, KSC Inspection	02/04/85	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
4-23	1.1.1.2	TWR-14799-2	SRM Postflight Hardware Inspection Report for STS-51C Part 2 of 2 Parts, Clearfield Inspection	04/15/85	2	U
4-23	1.1.1.2	TWR-14940-1	SRM Postflight Hardware Inspection Report STS-51D, Part 1 of 2 Parts, KSC Inspection	04/22/85	2	U
4-23	1.1.1.2	TWR-14940-2	Postflight Hardware Inspection Report for STS-51D Part 2 of 2 Parts Clearfield Inspection	08/29/85	2	U
4-23	1.1.1.2	TWR-14964-1	SRM Postflight Hardware Inspection Report for STS-51B Part 1 of 2 Parts, KSC Inspection	05/09/85	2	U
4-23	1.1.1.2	TWR-14964-2	SRM Postflight Hardware Inspection Report for STS-52B Part 2 of 2 Parts Clearfield Inspection	08/29/85	2	U
4-23	1.1.1.2	TWR-15074-1	SRM Postflight Hardware Inspection Report for STS-51G, Part 1 of 2 Parts, KSC Inspection	06/27/85	2	U
4-23	1.1.1.2	TWR-15074-2	SRM Postflight Hardware Inspection Report for STS-51G, Part 1 of 2 Parts, Clearfield Inspection	10/21/85	2	U
4-23	1.1.1.2	TWR-15105-2	SRM Postflight Hardware Inspection Report for STS-51F (SRM-19) Part 2, Clearfield Inspection	11/11/85	2	U
4-23	1.1.1.2	TWR-15182-1	SRM Postflight Hardware Inspection Report for STS-51I (SRM-20) Part 1 of 2 Parts KSC Inspection	09/19/85	2	U
4-23	1.1.1.2	TWR-15182-3	SRM Postflight Hardware Inspection Report for STS-51I (SRM-20) Part 20, Clearfield Inspection	12/17/85	2	U
4-23	1.1.1.2	TWR-15270-1	SRM Postflight Hardware Inspection Report for STS-51J (SRM-21) Part 1 of 2 Parts KSC Inspection	10/15/85	2	U
4-23	1.1.1.2	TWR-15292-1	SRM Postflight Hardware Inspection Report for STS-61A (SRM-22) Part 1, KSC Inspection	11/11/85	2	U
4-23	1.1.1.2	TWR-15292-2	SRM Postflight Hardware Inspection Report for Flight 61A (LQ22) Part 2 of 2 Parts Clearfield Inspection	03/06/86	2	U
4-23	1.1.1.2	TWR-15304	Postflight Hardware Assessment at KSC, Documentation of Flights STS-6 through 41C (Motor Sets SRM-006 Through SRM-001)	Nov 85	2	U
4-23	1.1.1.2	TWR-15370-1	SRM Postflight Hardware Inspection Report for STS-61B (SRM-23) Part 1, KSC Inspection	12/11/85	2	U
4-23	1.1.1.2	TWR-15370-2	SRM Postflight Hardware Inspection Report for STS-61B (SRM-23) Part 2 of 2 Parts Clearfield Inspection	Jun 86	2	U
4-23	E9102	TWR-15412-2	SRM Postflight Hardware Inspection Report for STS-61C (SRM-24) Part 2 of 2 Parts, Clearfield Inspection	Sep 86	2	U
4-23	E9101	TWR-15421-1	SRM Postflight Hardware Inspection Report for STS-61C (SRML024) Part 1 of 2 Parts, KSC Inspection	01/24/86	2	U
4-23		TWR-17420	RSRM Postflight Hardware Evaluation Ten-Day Report for RSRM-1 (STS-26R)	10/24/88	2	U

PART 1

DR NO. ==	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
4-27	48102	TWR-15721 Rev B	Flight Systems Hazard Reports for the Space Shuttle Redesign Solid Rocket Motor (RSRM) (Preliminary), Volume 1 thru 4	08/16/89	1	U
4-27		TWR-16431	Flight Safety Analysis Report for the Space Shuttle Redesign Solid Rocket Motor (RSRM)	09/07/88	1	U
4-3	1.4.2.2.2	TWR-10168 Rev K	Failure Mode Effects Analysis and Critical List Report	12-15-82	2	U
4-3	1.4.2.2.2	TWR-12622	Failure Mode Effects Analysis for SRM Test Electrical Checkout S/A Device, P/N 8U50364	02-15-80	2	U
4-3	1.4.2.2.2	TWR-13067 Rev C	Failure Mode Effects Analysis and Critical Items Report for Space Shuttle High Performance SRM (STS-8 and Subs)		2	U
4-3	FN301	TWR-13749	Failure Mode Effects Analysis and Critical Items List Report for Space Shuttle FWC Solid Rocket Motor Project F001	Feb 85	3	U
4-31	HQ	TWR-17775	SRM Static Test Hazards Analysis Baseline Building T-24 - Test Management	11/24/87	2	U
4-31	HQ	TWR-18039	Operating and Support Hazards Analysis for SRM Large Motor Casting Pit Operations	05/13/88	2	U
4-31	HQ	TWR-18055	Operating and Support Hazards Analysis for SRM Final Assembly Operations Hazards Analysis No. 87-135	05/04/88	2	U
4-31	HQ	TWR-18130	Preliminary Hazards Analysis M-320 Drawing Review Analysis Addendum No. 2, Review of Final M-320 Drawing Changes Hazards Analysis No. 88-050	04/01/88	2	U
4-31	HQ	TWR-18346	Hazard Analysis M-197 Automated Film Board Handling System Specific Assessment No. 018	04/11/88	2	U
4-31	HQ	TWR-18367	SRM "Anti-Static Plastic Sheeting" and Personnel Grounding Hazards Analysis No. 88-102	05/11/88	2	U
4-31	HQ	TWR-18396	Fault Tree Analysis Recommendations for the Personal Injury from High Pressure Water Jet Impact of Personnel in Washout Bay MTI Hazards Analysis No. 86-178	05/16/88	2	U
4-31	HQ	TWR-18483	SRM Static Test Hazards Analysis Baseline Volume 1, Preliminary Hazards Analysis of the T-97 SRM Testing Facility Hazards Analysis No. 87-049	05/29/88	2	U
4-4	1.4.2.2.2	TWR-10167 Rev A	Performance and Preparation Procedure for Space Shuttle SRM Project Failure Mode Effects Analysis and Critical Items List (Approved)	12-18-74	1	U
4-5	4Q		SRM Significant Problem Report No. DR 4-5/106 (5 Day), Insulated Center/Aft Case Segment Washout, Due to Oil Contamination	12/06/88	2	U

PART 1

DR NO. ==	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
4-5	1.4.2.2.2	TWR-11053	SRM Significant Problem Report Nose/Inlet Housing Failure in First Prototype Flex Bearing Test	06-04-76	2	U
4-5	1.4.2.2.2	TWR-11084	SRM Significant Problem Report Nose/Inlet Housing Failure	06-29-76	2	U
4-5	1.4.2.2.2	TWR-11211	Incident Report, Ignition System Hydroburst Test	09/27/76	2	U
4-5	1.4.2.2.2	TWR-11220	SRM Significant Problem Report Gask-O-Seal Leak During Igniter Chamber/Adapter Pressure Test	10/11/76	2	U
4-5	1.4.2.2.2	TWR-11246-1	SRM Significant Problem Report (5 Day) Safety and Arm Device Failure to Arm	10/18/76	2	U
4-5	1.4.2.2.2	TWR-11246-1	21-Day Resolution Report, Safety and Arming Device Failure to Arm	11/05/76	2	U
4-5	1.4.2.2.2	TWR-11267-1	Significant Problem Report - Leak of Nozzle Flexible Bearing During Tensile Limit Testing	10/27/76	2	U
4-5	1.4.2.2.2	TWR-11267-2	21-Day Resolution Report, Leak of Nozzle Flexible Bearing During Tensile Limit Testing	11/19/76	2	U
4-5	1.4.2.2.2	TWR-11267-2	21-Day Resolution Report, Leak of Nozzle Flexible Bearing During Tensile Limit Testing	11/19/76	2	U
4-5	1.4.2.2.2	TWR-11353	Significant Problem Report (21 Day) Gask-O-Seal Leak During Development Ignition System Test No. 4	01/25-77	2	U
4-5	1.4.2.2.2	TWR-11439-2	21-Day Resolution Report, Safety and Arming Device Failure to Achieve Pressure	05/24/77	2	U
4-5	1.4.2.2.2	TWR-11441-2	21-Day Resolution Report, Non-Conforming Deflection of Nozzle Flexible Bearing Test During Tensile Limit Testing	05-31-77	2	U
4-5	1.4.2.2.2	TWR-11882-1	Significant Problem Report, DR 4-5/9, 5 Day Report, Field Joint Between the Forward Casting Segment and the Forward Center Casting Segment, Leakage at the Field Joint	06/12/78	2	U
4-5	1.4.2.2.2	TWR-11882-2	21-Day Resolution Report, Leakage at the Field Joint	11/07/78	2	U
4-5	1.4.2.2.2	TWR-12037-1	Significant Problem Report, DR 4-5/10, 5 Day Report, Barrier-Booster Seal Leaks	10/30/78	2	U
4-5	1.4.2.2.2	TWR-12037-2	21-Day Resolution Report, Barrier-Booster Seal Leaks	11/30/78	2	U
4-5	1.4.2.2.2	TWR-12112-1	Significant Problem Report DR 4-5/11, 5-Day Report, SRM Flexible Bearing, Tensile Deflection Test Failure	01/02/79	2	U
4-5	1.4.2.2.2	TWR-12112-2	21-Day Resolution Report, SRM Flexible Bearing, Tensile Deflection Test Failure	01/23/79	2	U
4-5	1.4.2.2.2	TWR-12189-1	Significant Problem Report, DR 4-5/12, 5-Day Report, Nozzle Cut-Off LAT/Qual Propagation	02/28/79	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
4-5	1.4.2.2.2	TWR-12278-1	Significant Problem Report, DR 4-5/13, 5-Day Report, Igniter Qualification Firing Failure	04-18-79	2	U
4-5	1.4.2.2.2	TWR-12278-2	21-Day Resolution Report, Igniter Qualification Firing Failure	May 1979	2	U
4-5	1.4.2.2.2	TWR-12404-2	21-Day Resolution Report, SRM Floor Plate Bond Failure		2	U
4-5	1.4.2.2.2	TWR-12605-1	Significant Problem Report, DR 4-5/16, 5-Day Report, Gask-O-Seal/STAT-O-Seal Leak During Igniter System Leak Test	01/30/80	2	U
4-5	1.4.2.2.2	TWR-12605-2	21-Day Resolution Report, Gask-O-Seal/Stat-O-Seal	03/03/80	2	U
4-5	1.4.2.2.2	TWR-12632-1	Significant Problem Report, DR 4-5/17, 5-Day Report, Safe and Arm Device Partial Rotation From Safe to Arm - Drop Test for S&A Container	02/20/80	2	U
4-5	1.4.2.2.2	TWR-12632-2	21-Day Resolution Report, Safe and Arm Device Rotation During Drop Test for S&A Container		2	U
4-5	1.4.2.2.2	TWR-12659-1	Significant Problem Report, DR 4-5/18, 5-Day Report, Safe and Arming Device NSI O-Ring Seal Pressure Leakage		2	U
4-5	1.4.2.2.2	TWR-12659-2	21-Day Resolution Report, Safe and Arming Device NSI O-Ring Seal Pressure Leakage	04/21/80	2	U
4-5	1.4.2.2.2	TWR-12875-1	Significant Problem Report, DR 4-5/19, 5-Day Report Safe and Arm Device Partial Rotation	12/03/80	2	U
4-5	1.4.2.2.2	TWR-12875-2	21-Day Resolution Report, Safe and Arming Device Partial Rotation	01/15/81	2	U
4-5	1.4.2.2.2	TWR-12919-1	Significant Problem Report, DR 4-5/20, 5-Day Report, Safe and Arming Device Partial Rotation/Motor Failure		2	U
4-5	1.4.2.2.2	TWR-12919-2	21-Day Resolution Report, Safe and Arming Device Partial Rotation/Motor Failure	01/15/81	2	U
4-5	1.4.2.2.2	TWR-12941-1	Significant Problem Report, DR 4-5/21, 5-Day Report, Safety and Arming Device Slow Cycling Times		2	U
4-5	1.4.2.2.2	TWR-12941-2	21-Day Resolution Report, Safe and Arm Device Slow Cycling Times	02/15/81	2	U
4-5	1.4.2.2.2	TWR-13114-1	Significant Problem Report, DR 4-5/22, 5-Day Report, LSC Delta Qual Test Failure	08/07/81	2	U
4-5	1.4.2.2.2	TWR-13114-2	21-Day Resolution Report, LSC Delta Qual Test Failure	08-27-83	2	U
4-5	1.1.1.3.2	TWR-14017-1	Significant Problem Report, DR 4-5/24, 5-Day Report, Hydroproof Failure of Lightweight Stiffener Segment 1U50715-01	10/20/83	2	U
4-5	1.1.1.3.2	TWR-14017-2	21-Day Resolution Report, Hydroproof Failure of Lightweight Stiffener Segment 1U50715-01	11/10/83	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
4-5	1.1.1.3.2	TWR-14018-2	21-Day Resolution Report, Excessive Erosion of STS-8A Nozzle		2	U
4-5	1.1.1.3.2	TWR-14111-1	Significant Problem Report, DR 4-5/25, 5-Day Report, Nozzle Severance System LAT Failure (Lot AAD)	12/13/83	2	U
4-5	1.1.1.3.2	TWR-14112-1	Significant Problem Report, DR 4-5/26, 5-Day Report, Safety and Arming Device Arming-Monitor Torque Test Failure	12/13/83	2	U
4-5	1.1.1.2.4	TWR-14112-2	21-Day Resolution Report, Safety and Arming Device Arming-Monitor Torque Test Failure	02/13/84	2	U
4-5	1.1.1.2.4	TWR-14217-1	SRM Significant Problem Report, DR 4-5/27, (5 Day) S&A Barrier/Booster (B-B) Arm Monitor Switch Opening and Safe Monitor Switch Closure Exceed Specification Limit	02/13/84	2	U
4-5	1.1.1.2.4	TWR-14217-2	21-Day Resolution Report, S&A Booster/Barrier (B-B) Arm Monitor Switch Opening and Safe Monitor Switch Closure Exceed Specification Limits	03-18-84	2	U
4-5	1.1.1.2.4	TWR-14218-1	SRM Significant Problem Report, DR 4-5/28, (5 Day) Safe and Arming Device Barrier/Booster (B-B) Pressure Test Failure	02/13/84	2	U
4-5	1.1.1.2.4	TWR-14218-2	21-Day Resolution Report, Safe and Arm Device Barrier/Booster (B-B) Pressure Test Failure	03/13/84	2	U
4-5	1.1.1.2.4	TWR-14219-1	SRM Significant Problem Report, DR 4-5/29, (5 Day) Safety and Arming Device Arming-Monitor Assembly (A-M) Torque Test Failure	03/13/84	2	U
4-5	1.1.1.2.4	TWR-14219-2	21-Day Resolution Report, Safety and Arming Device Arming-Monitor Assembly (A-M) Torque Test Failure	03/14/84	2	U
4-5	1.1.1.2.4	TWR-14272-1	SRM Significant Problem Report, DR 4-5/31 (5 Day) O-Ring Char at Nozzle/Aft Segment Joint of SRM A58 (STS-11B/Mission 41B)	03/13/84	2	U
4-5	1.1.1.2.4	TWR-14272-2	21-Day Resolution Report, DR 4-5/31, O-Ring Char at Nozzle Aft Segment Joint of SRM A58 (STS-11B)	04/11/84	2	U
4-5	1.1.1.2.4	TWR-14283-1	SRM Significant Problem Report, DR 4-5/30, (5 Day) Slight Char Condition on Primary O-Ring Seal in Forward Field Joint of SRM A57 (STS-11 Flight, Mission 41B)	03/11/84	2	U
4-5	1.1.1.2.4	TWR-14283-2	21-Day Resolution Report, Slight Char Condition on Primary O-Ring Seal in Forward Field Joint of SRM A57 (STS-11 Flight, Mission 41B)	01/11/84	2	U
4-5	1.1.1.2.4	TWR-14313-1	SRM Significant Problem Report, DR 4-5/32, (5 Day) Excessive Erosion at the Forward Nose Ring/Aft Inlet Ring Interface (STS-11B Nozzle, Mission 41B, SRM 10)	03/22/84	2	U
4-5	1.1.1.2.4	TWR-14313-2	21-Day Resolution Report, Excessive Erosion at the Forward	04/11/84	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
4-5	1.1.1.2.4	TWR-14365-1	SRM Significant Problem Report, DR 4-5/33, (5 Day) Barrier/Booster Assembly Current Leakage Problem	05/01/84	2	U
4-5	1.1.1.2.4	TWR-14365-2	21-Day Resolution Report, Barrier/Booster Assembly Current Leakage Problem	05/23/84	2	U
4-5	1.1.1.2.4	TWR-14366-1	SRM Significant Problem Report, DR 4-5/34, (5 Day) Arm Monitor Switch Opening Anomaly	05/01/84	2	U
4-5	1.1.1.2.4	TWR-14366-2	21-Day Resolution Report, Arm Monitor Switch Opening Anomaly	05/23/84	2	U
4-5	1.1.1.2.4	TWR-14370-1	SRM Significant Problem Report, DR 4-5/35, 5-Day O-Ring Erosion at Nozzle/Aft Segment Joint of SRM-11A (STS-13/Mission 41C)	05/07/84	2	U
4-5	1.1.1.2.4	TWR-14370-2	21-Day Resolution Report, O-Ring Erosion at Nozzle/Aft Segment Joint of SRM-11A (STS-13/Mission 41C)	05/29/84	2	U
4-5	1.1.1.2.4	TWR-14422-1	SRM Significant Problem Report, DR 4-5/37, (5 Day), Insulation Unbound to the Forward Segment of SRM 11A (Mission 41C)	06-20-84	2	U
4-5	1.1.1.2.4	TWR-14422-2	21-Day Resolution Report, Insulation Unbound in the Forward Segment of SRM 11A (Mission 41C)	07/12/84	2	U
4-5	1.1.1.2.4	TWR-14427-1	SRM Significant Problem Report, DR 4-5/36, (5 Day), Pathfinder (DF-001) Hydrotest Incident	06/15/84	2	U
4-5	1.1.1.2.4	TWR-14600-1	SRM Significant Problem Report, DR 4-5/38 (5 Day), O-Ring Erosion on Mission 41D (SRM-13B)	Sept 84	2	U
4-5	1.1.1.2.4	TWR-14600-2	21-Day Resolution Report, O-Ring Erosion on Mission 41D (SRM-13B)	10/22/84	2	U
4-5	1.1.1.2.4	TWR-14626-1	SRM Significant Problem Report, DR 4-5/39, 5-Day, O-Ring Heat Damage at Nozzle Joint of SRM-13A (41D)	10/04/84	2	U
4-5	1.1.1.2.4	TWR-14626-2	21-Day Resolution Report, O-Ring Heat Damage Nozzle Joint of SRM 13A (41D)	10/29/84	2	U
4-5	1.1.1.2.4	TWR-14648-1	SRM Significant Problem Report, DR 4-5/40, (5 Day), Transducer Bolt Assembly on SRM-12B STS-17/41G, Improperly Torqued	10/18/84	2	U
4-5	1.1.1.2.4	TWR-14658-2	21-Day Resolution Report, Transducer Bolt Assembly on SRM-12B, STS-17/41G Improperly Torqued	12/06/84	2	U
4-5	1.1.1.2.4	TWR-14803-1	SRM Significant Problem Report, DR 4-5/41 (5 Day), Charring of the Primary O-Ring Seal in the Forward Field Joint of SRM-15A and the Center Field Joint of SRM 15B during Mission 51C	02/06/85	2	U
4-5	1.1.1.2	TWR-14803-2	21-Day Resolution Report, Charring of the Primary O-Ring Seal in the Forward Field Joint of SRM-15A and the Center Field Joint of SRM 15 B during Mission 51C	03/01/85	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
4-5	1.1.1.2	TWR-14941-1	SRM Significant Problem Report No. DR 4-5/42 (5 Day), Nozzle Throat Ring Pocketing on Mission 51D (SRM-17B)	03/01/85	2	U
4-5	1.1.1.2	TWR-14941-2	21-Day Resolution Report, Nozzle Throat Ring Pocketing on Mission 51D (SRM 17B)	05/10/85	2	U
4-5	1.1.1.2	TWR-14984-1	SRM Significant Problem Report, DR 4-5/44 (5 Day), Abnormal Tears in the Stress Relief Flap of SRM 16B Forward Segment (51B)	05/20/85	2	U
4-5	1.1.1.2	TWR-14984-2	21-Day Resolution Report, Abnormal Tears in the Stress Relief Flap on SRM 16B Forward Segment (51B)	06/24/85	2	U
4-5	FN301	TWR-14999	SRM Significant Problem Report No. DR 4-5/43 (5 and 21 Day) Erosion of the Primary Igniter Gasket Viton Seal of Development Motor No. 6	05/28/85	2	U
4-5	1.1.1.2	TWR-15015-1	SRM Significant Problem Report No. DR 4-5/45 (5 Day), Shrader Valve Leak in A-M 1U50266-01 S/N 0000003	05-24-85	2	U
4-5	1.1.1.2	TWR-15015-2	21-Day Resolution Report, Shrader Valve Leak in A-M 1U50266-01, S/N 0000003	07/08/85	2	U
4-5	1.1.1.2	TWR-15019-1	SRM Significant Problem Report No. 4-5/46 (5 Day) Acceptance Torque Test Failure of Arming Monitor S/N 0000034	06/06/85	2	U
4-5	1.1.1.2	TWR-15019-2	21-Day Resolution Report, Acceptance Torque Test Failure of Arming Monitor S/N 0000034	06/17/85	2	U
4-5	1.1.1.2	TWR-15022-1	SRM Significant Problem Report No. 4-5/47 (5 Day) LSC Lot AAE Vibration Test Failure	05/30/85	2	U
4-5	FN301	TWR-15024-1	SRM Significant Problem No. DR 4-5/44 (5 Day) Erosion in the Case to Nozzle Joint of Development Motor No. 7	06/24/85	2	U
4-5	FN301	TWR-15024-2	21-Day Resolution Report, Erosion in the Case to Nozzle Joint of Development Motor No. 7	07/03/85	2	U
4-5	1.1.1.2	TWR-15091-2	SRM Significant Problem Report No. DR 4-5/49 (21 Day) Resolution Report, Secondary O-Ring Erosion in the Nozzle to Case Joint on Mission 51B (SRM 16A)	07/29/85	2	U
4-5	FN301	TWR-15121-2	21-Day Resolution Report, STA-2 Failure at MSFC	09/09/85	2	U
4-5	FN301	TWR-15132-1	SRM Significant Problem Report No. DR 4-5/50 (5 Day) STA-2 Failure at MSFC	08/08/85	2	U
4-5	1.1.1.2	TWR-15279-1	SRM Significant Problem Report No. 4-5/51 (5 Day) Outer-Boot-Ring Material Loss During Mission 51J on SRM 21A	10/05/85	2	U
4-5	1.1.1.2	TWR-15279-2	21-Day Resolution Report No. DR 4-5/51, Outer-Boot-Ring Material Loss During Mission 51J on SRM 21A	11/18/85	2	U



PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
4-5	1.1.1.2	TWR-15282-1	SRM Significant Problem Report No. DR 4-5/52 (5 Day) Tang End NBR Insulation Debonds on Mission 51J SRM Flight Set 21	10/28/85	2	U
4-5	1.1.1.2	TWR-15285 A	SRM Significant Problem Report No. DR 4-5/53 (21 Day) STS 51F (SRM-19A) Nozzle Nose Inlet Aluminum Housing Heat Effect	11/12/87	2	U
4-5	1.1.1.2	TWR-15328-1	SRM Significant Problem Report No. DR 4-5/54 (5 Day) Fractured Nozzle Nose Inlet Aluminum Housing on Flight 51A (SRM L022B)	11/21/85	2	U
4-5	1.1.1.2	TWR-15328-2	21-Day Resolution Report No. DR 4-5/54, Fractured Nozzle Nose Inlet Aluminum Housing on Flight 51A (SRM-L022B)	12/20/85	2	U
4-5	1.1.1.2	TWR-15455-1	SRM Significant Problem Report No. DR 4-5/55 (5 Day) Tang and Clevis End NBR Insulation Unbonds on Mission 61C SRM Flight Set 24	01/30/86	2	U
4-5	1.1.1.2	TWR-15455-2 A	21-Day Resolution Report No. DR 4-5/55 Tang and Clevis End NBR Insulation Unbonds on Mission 61C SRM Flight Set 24	03/21/86	2	U
4-5	1.1.1.2	TWR-15570-1	SRM Significant Problem Report No. DR 4-5/57 (5 Day) Insulation Erosion in the Aft Field Joint Region of SRM 24A	06/17/86	2	U
4-5	1.1.1.2	TWR-15570-2	21-Day Resolution Report No. DR 4-5/57 Insulation Erosion in the Aft Field Joint Region of SRM 24A	06/17/86	2	U
4-5	1.1.1.2	TWR-15646-1	SRM Significant Problem Report No. DR 4-5/58 (5 Day) System Tunnel Insulated Cover Assembly Discrepancies	06/30/86	2	U
4-5	1.1.1.2	TWR-15646-2	21-Day Resolution Report No. DR 4-5/58 System Tunnel Insulated Cover Assembly Discrepancies	07/23/86	2	U
4-5	HQ	TWR-15988-1	SRM Significant Problem Report No. DR 4-5/59 (5 Day) Referee Test Missing Pins	11/24/86	2	U
4-5	HQ	TWR-15988-2	21-Day Resolution Report, Referee Test Missins Pins	01/13/87	2	U
4-5	HQ	TWR-16139-1 A	SRM Significant Problem Report No. DR 4-5/60 (5 Day) Referee Test No. 5 Assembly Failure, Installation Test	02/13/87	2	U
4-5	HQ	TWR-16139-2	21-Day Resolution Report, Referee Test No. 5 Assembly Failure Installation Test	02/19/87	2	U
4-5	4Q	TWR-16384-1	SRM Significant Problem Report DR 4-5/108 (24 Hour/5 Day) Nozzle Bolts, Low Ultrasonic Preload	08/26/88	2	U
4-5	4Q	TWR-16384-2	SRM Significant Problem Report No. DR 4-5/108 (21 Day), Nozzle Bolts Low Ultrasonic Preload	10/05/88	2	U
4-5	4Q	TWR-16453-1	SRM Significant Problem Report No. DR 4-5/109 (5 Day) Forward Field Joint Contamination , PV-1	09/15/88	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
4-5	4Q	TWR-16453-2	SRM Significant Problem Report No. DR 4-5/109 (21 Day), Forward Field Joint Contamination (Greased Soaked Cloth), PV-1	10/11/88	2	U
4-5	HQ	TWR-16748-1	SRM Significant Problem Report No. DR 4-5/65 (5 Day) Postfire Paint Blistering Observed on Aft Segment ETM-1A Static Motor Test	08/25/87	2	U
4-5	HQ	TWR-16748-2	21-Day Resolution Report, Postfire Paint Blistering Observed on Aft Attach Segment ETM-1A Static Motor Test	08/25/87	2	U
4-5	HQ	TWR-16836-1	SRM Significant Problem Report No. DR 4-5/69 (5 Day) Scrapped Exit Cone Due to Vacuum Loss DR No. 152106	08/17/87	2	U
4-5	HQ	TWR-16836-2	21-Day Resolution Report, Scrapped Exit Cone due to Vacuum Loss	09/17/87	2	U
4-5	HQ	TWR-16871-1	SRM Significant Problem Report No. DR 4-5/66 (5 Day) Erosion Anomalies, Aft Exit Cone ETM-1A		2	U
4-5	HQ	TWR-16871-2	21-Day Resolution Report, Erosion Anomalies, Aft Exit Cone ETM-1A	09/25/87	2	U
4-5	HQ	TWR-16898-1	SRM Significant Problem Report No. DR 4-5/71 (5 Day) DM-8 Aft Exit Cone Joint Assembly Damage	09/14/87	2	U
4-5	HQ	TWR-16898-2	21-Day Resolution Report, DM-8 Aft Exit Cone Joint Assembly Damage	09/21/87	2	U
4-5	HQ	TWR-16905-1	SRM Significant Problem Repoert No. DR 4-5/80 (5 Day) Nose Cap Aft End Bond Separation	09/14/87	2	U
4-5	HQ	TWR-16905-2 A	21-Day Resolution Report, Nose Cap Aft End Bond Separation	11/17/87	2	U
4-5	HQ	TWR-16913-1	SRM Significant Problem Report No. DR 4-5/72 DM-8 Forward-to-Aft Exit Cone Joint Leak Test Failure	08/27/87	2	U
4-5	HQ	TWR-16913-2	21-Day Resolution Report, DM-8 Forward-to-Aft Exit Cone Joint Leak Test Failure	09/30/87	2	U
4-5	HQ	TWR-16978-1	SRM Significant Problem Report No. DR 4-5/73 (5 Day) Postfire Burn Spots and Crack on Aft Segment DM-8 Static Motor Test		2	U
4-5	HQ	TWR-16978-1	21-Day Resolution Report, Postfire Burn Spots and Crack on Aft Segment DM-8 Static Test Motor	10/09/87	2	U
4-5	HQ	TWR-17203-1	SRM Significant Problem Report No. DR 4-5/75 (5 Day) Aft Casting Segment Inclusion, DM-9	10/26/87	2	U
4-5	HQ	TWR-17203-2	21-Day Resolution Report, Problem No DR 4-5/75	11/16/87	2	U
4-5	HQ	TWR-17232-1	SRM Significant Problem Report No. DR 4-5/77 (5 Day) Scrapped DM-9 Nozzle Throat-Inlet Assembly	10/26/87	2	U
4-5	HQ	TWR-17232-2	21-Day Resolution Report, Problem No. DR 4-5/77	11/11/87	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
4-5	HQ	TWR-17314-1	SRM Significant Problem Report DR 4-5/78 (5 Day) Exit Cone Assembly, Forward Section Machining Problem	11/09/87	2	U
4-5	HQ	TWR-17314-2	21-Day Resolution Report, Problem No. DR 4-5/78	12/02/87	2	U
4-5	HQ	TWR-17745-1	SRM Significant Problem Report No. DR 4-5/79 (24 Hour/5 Day) Insulation Unbonds, Center Segment	11/23/87	2	U
4-5	HQ	TWR-17745-2	21-Day Resolution Report, Problem No. DR 4-5/79	01/05/88	2	U
4-5	HQ	TWR-17776-1	SRM Significant Problem Report No. DR 4-5/81 (24 Hour/5 Day) Scrapped Case Segment, Capture Cylinder, Standard Weight	12/03/87	2	U
4-5	HQ	TWR-17776-2	21-Day Resolution Report, Problem No. DR 4-5/81	01/15/88	2	U
4-5	HQ	TWR-17868-1	SRM Significant Problem Report No. DR 4-5/84 (24 Hour/5 Day) Scrapped Aft Exit Cone due to Vacuum Loss, DR No. 156201	01/15/88	2	U
4-5	HQ	TWR-17868-2	21-Day Resolution Report, Problem No. DR 4-5/84	02/11/88	2	U
4-5	HQ	TWR-17888	SRM Significant Problem Report No. DR 4-5/83 (5 Day) Nose Cap, Second Machine, Scrapped due to Improper Grit Blast	12/24/87	2	U
4-5	HQ	TWR-17888-2	21-Day Resolution Report, Problem No. DR 4-5/83		2	U
4-5	4B	TWR-17898-1	SRM Significant Problem Report No. DR 4-5/86 (24 Hour/5 Day) Aft Casting Segment Inclusion RSRM Flight, Flight 1A	01/06/88	2	U
4-5	4B	TWR-17898-2	21-Day Resolution Report, Problem No. DR 4-5/86	02/04/88	2	U
4-5	HQ	TWR-17916-1	SRM Significant Problem Report No. DR 4-5/87 (5 Day) DM-9 Involute Boot Ring, Material Loss	02/04/88	2	U
4-5	HQ	TWR-17916-2	21-Day Resolution Report, Problem No. DR 4-5/87		2	U
4-5	HQ	TWR-17937-1	SRM Significant Problem Report No. DR 4-5/90 (5 Day) DM-9 Transducer Bolt Assembly Union Improperly Torqued	01/18/88	2	U
4-5	HQ	TWR-17937-2	21-Day Resolution Report, Problem No. DR 4-5/90	02/15/88	2	U
4-5	HQ	TWR-18071-1	SRM Significant Problem Report No. DR 4-5/91 (5 Day) DM-9 Igniter Outer Gask-O-Seal Primary Seal Subsurface Void with Contamination	02/15/88	2	U
4-5	HQ	TWR-18071-2	21-Day Resolution Report, Problem No. DR 4-5/91		2	U
4-5	HQ	TWR-18079-1	SRM Significant Problem Report No. DR 4-5/85 (5 Day) DM-9 Safe and Arm Device Failure	02/26/88	2	U
4-5	HQ	TWR-18079-2	21-Day Resolution Report, Problem No. DR 4-5/85	03/28/88	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
4-5	HQ	TWR-18177-1	SRM Significant Problem Report No. DR 4-5/92 (5 Day) Insulated Aft Dome Washout, Due to Cure Temperature and Pressure Loss	03/10/88	2	U
4-5	HQ	TWR-18177-2	21-Day Resolution Report, Problem No. DR 4-5/92	03/28/88	2	U
4-5	HQ	TWR-18198-1	SRM Significant Problem Report No. DR 4-5/93 (5 Day) Insulated FWD Segment-FWD Assembly Washout, Due to Loss of Pressure During Autoclave Cure	03/10/88	2	U
4-5	HQ	TWR-18198-2	21-Day Resolution Report, Problem No. DR 4-5/93	04/14/88	2	U
4-5	HQ	TWR-18242-1	Significant Problem Report No. DR 4-5/94 (5 Day) DM-9 Cowl Ring Wedge Out	04/14/88	2	U
4-5	HQ	TWR-18242-2	21-Day Resolution Report, Problem No. DR 4-5/94	05/02/88	2	U
4-5	HQ	TWR-18290-1	Significant Problem Report No. DR 4-5/95 (5 Day) Clevis End Unbond, Aft RH Segment RSRM 360L001	04/11/88	2	U
4-5	HQ	TWR-18290-2	21-Day Resolution Report, Problem No. DR 4-5/95	05/17/88	2	U
4-5	HQ	TWR-18309-1	Significant Problem Report No. DR 4-5/97 (5 Day) Erosion, Forward Exit Cone, DM-9	04/13/88	2	U
4-5	HQ	TWR-18309-2	21-Day Resolution Report, Problem No. DR 4-5/97	05/03/88	2	U
4-5	HQ	TWR-18368-1	Significant Problem Report No. DR 4-5/98 (5 Day) Factory Joint, Primary O-Ring Damage, Aft Segment, DM-9	05/02/88	2	U
4-5	HQ	TWR-18368-2	21-Day Resolution Report, Problem No. DR 4-5/98	05/25/88	2	U
4-5	HQ	TWR-18393-1	Significant Problem Report No. DR 4-5/99 (5 Day) Custom Vent Port Plug Pressure Leakage Past Primary O-Ring NJES Static Test	05/12/88	2	U
4-5	HQ	TWR-18393-2	21-Day Resolution Report, Problem No. DR 4-5/99	06/08/88	2	U
4-5	HQ	TWR-18431-1	Significant Problem Report No. DR 4-5/100 (5 Day) QM-6 S&A Gask-O-Seal Suspected Surface Anomaly	05/23/88	2	U
4-5	HQ	TWR-18431-2	21-Day Resolution Report, Problem No. DR 4-5/100	06/23/88	2	U
4-5	HQ	TWR-18437-1	Significant Problem Report No. DR 4-5/101 (5 Day) Erosion, Aft Exit Cone, DM-9	05/25/88	2	U
4-5	HQ	TWR-18437-2	21-Day Resolution Report, Problem No. DR 4-5/101	06/15/88	2	U
4-5	HQ	TWR-18454-1	Significant Problem Report No. DR 4-5/102 (5 Day) Sealing Surface Contamination (Grease Soaked Cloth) QM-6 Forward Field Joint	05/25/88	2	U
4-5	HQ	TWR-18454-2	21-Day Resolution Report, Problem No. DR 4-5/102	06/27/88	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
4-5	4Q	TWR-18653-2	SRM Significant Problem Report No. DR 4-5/104 (21 Day) Center Field Joint Leak Test Problem	08/10/88	2	U
4-5	4Q	TWR-18771-1	SRM Significant Problem Report No. DR 4-5/110 (5 Day) Clevis O-Ring Inadvertently Installed on Forward Tang of RSRM-2B	09/19/88	2	U
4-5	4Q	TWR-18771-2	SRM Significant Problem Report No. DR 4-5/110 (21 Day), Clevis O-Ring Inadvertently Installed in Forward Tang of RSRM-2B	10/13/88	2	U
4-5	4Q	TWR-18789-1	SRM Significant Problem Report No. DR 4-5/111 (5 Day/21 Day) Fluorocarbon Elastomer Rubber Not in Compliance with Mil-R-83248A Test Requirements	09/26/88	2	U
4-5	4Q	TWR-18806-2	SRM Significant Problem Report No. DR 4-5/112 (21 Day), PVM-1 Forward Nose Ring Problem	10/31/88	2	U
4-5	4Q	TWR-18834-1	SRM Significant Problem Report No. DR 4-5/113 (5 Day), Nozzle Leak Check Port Plug Seating	10/12/88	2	U
4-5	4Q	TWR-18834-2	SRM Significant Problem Report No. DR 4-5/113 (21 Day), Nozzle Leak Check Port Plug Seating	11/03/88	2	U
4-5	4B	TWR-18836-2	SRM Significant Problem Report No. DR 4-5/114 (21 Day), DFI TPS Debris in Flight Anomaly (IFA) Report No. STS-26-M-1	11/08/88	2	U
4-5	4Q	TWR-18846-1	SRM Significant Problem Report No. DR 4-5/115 (5 Day), Aft Dome Insulation Voids, RSRM-4B	10/26/88	2	U
4-5	4Q	TWR-18846-2 Rev A	SRM Significant Problem Report No. DR 4-5/115 (21 Day), Aft Dome Insulation Voids, RSRM-4B	12/08/88	2	U
4-5	4Q	TWR-18872-1	SRM Significant Problem Report No. DR 4-5/116 (5 Day) RSRM-3B, Nozzle to Case Joint, Leak Check Failure	11/03/88	2	U
4-5	4Q	TWR-18873-1	SRM Significant Problem Report No. DR 4-5/117 (5 Day), QM-8 Nozzle to Case Joint, Leak Check Failure	11/03/88	2	U
4-5	4B	TWR-18906-1	SRM Significant Problem Report No. DR 4-5/118 (5 Day), Joint Moisture Seal Vent Valve Anomaly RSRM-1, In Flight Anomaly STS-26-M-2	11/14/88	2	U
4-5	4B	TWR-18906-2	SRM Significant Problem Report No. DR 4-5/118 (21 Day), Joint Moisture Seal Vent Valve Anomaly RSRM-1, In Flight Anomaly No. STS-26-M-2	12/14/88	2	U
4-5	4B	TWR-18910-1	SRM Significant Problem Report No. DR 4-5/123 (5 Day), Fretting in the Field Joints of the STS-26 (RSRM-1) In Flight Anomaly No. STS-26-M-3	11/17/88	2	U
4-5	4B	TWR-18910-2	SRM Significant Problem Report No. DR 4-5/123 (21 Day), Fretting in the Field Joints of the STS-26 (RSRM-1), In Flight Anomaly No. STS-26-M-3	12/16/88	2	U

PART 1

DR NO. ==	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
4-5	4Q	TWR-18960-1	SRM Significant Problem Report No. DR 4-5/121 (5 Day), Forward Case Segment Washout, RSRM-5A	1/01/88	2	U
4-5	4Q	TWR-18971-1	SRM Significant Problem Report No. DR 4-5/119 (5 Day), Forward Exit Cone Second Machine, S/N 0000024, Scrapped, Wet Line Indications	12/06/88	2	U
4-5	4Q	TWR-18972-1	SRM Significant Problem Report No. DR 4-5/122 (5 Day), Forward Exit Cone Second Machine, S/N 0000025, Scrapped, Wet Line Indications	12/06/88	2	U
4-5	4Q	TWR-18973-1	SRM Significant Problem Report No. DR 4-5/121 (5 Day), Aft Exit Cone Second Machine, S/N 0000014, Scrapped, Low Density Indications	12/06/88	2	U
4-5	4Q	TWR-18996-1	SRM Significant Problem Report No. DR 4-5/129 (5 Day), Igniter Heater Failure, QM-8 P/N 1U76341-01	12/12/88	2	U
4-5	4B	TWR-18999-1	SRM Significant Problem Report No. DR 4-5/126 (5 Day), RSRM-2 Heaters Charred, In Flight Anomaly Report No. STS-27-M-1	12/16/88	2	U
4-5	4B	TWR-19000-1	SRM Significant Problem Report No. DR 4-5/127 (5 Day), RSRM-2 JPS Debris form FH Center Field Joint, In Flight Anomaly Report No. STS-27-M-2	12/16/88	2	U
4-5	4B	TWR-19004-1	SRM Significant Problem Report No. DR 4-5/131 (5 Day), Fretting in the Field Joints of STS-27 (RSRM-2), In Flight Anomaly No. STS-27-M-5	12/19/88	2	U
4-5	4B	TWR-19007-1	SRM Significant Problem Report No. DR 4-5/128 (5 Day), Bolt Damage in the Aft Exit Cone to Forward Exit Cone Joint of RSRM-2B, In Flight Anomaly No. STS-27-M-3	1/15/88	2	U
4-5	4Q	TWR-19008-1	SRM Significant Problem Report No. DR 4-5/125 (5 Day), Aft Exit Cone, Foreign Material (Yellow Vinyl Tape) Exits in Carbon Billet, Designated for RSRM-6B	12/20/88	2	U
4-5	4Q	TWR-19013-1	SRM Significant Problem Report No. DR 4-5/130 (5 Day), Field Joint Thermal Protection System Water Entry RSRM-2, In Flight Anomaly No. STS-27-M-4	12/16/88	2	U
4-5	4Q	TWR-19195-1	SRM Significant Problem Report No. DR 4-5/135 (5 Day), RSRM-2 LH Ignition Rise Rate Delay	02/13/88	2	U
4-5	1.1.1.2	TWR_15024-1	21-Day Resolution Report, LSC Lot AAE Vibration Test Failure	06/24/85	2	U
5-3	1.4.2.3.3	TWR-10647	Results of Space Shuttle SRM Clevis Joints Test	01/21/76	2	U
5-3	1.4.2.3.6	TWR-10672	SRM Pyrotechnic Booster Charge Test Report	10/02/75	2	U
5-3	1.4.2.3.3	TWR-10688 Rev A	SRM D6AC Direct Quench Heat Treat Qualification Program Phase 1A & 1B	02/27/76	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-3	1.4.2.3.3	TWR-10701 Rev A	Test Report - Aft Case Segment Forging Evaluation SRM Case Program P/N 1U50129	08/18/78	2	U
5-3	1.4.2.3.3	TWR-10703 Rev A	Test Report - Evaluation of the Forging for the SRM Attach Case Segment P/N 1U50130	08/16/78	2	U
5-3	1.4.2.3.5	TWR-10707	Test Report - Evaluation of the Forging for the SRM Nozzle Exit Cone Housing, P/N 1U50082	05/24/77	2	U
5-3	1.4.2.3.5	TWR-10709	Test Report - Evaluation of the Forging for the SRM Aft End Ring of the Flexible Bearing, P/N 1U50083	03/02/77	2	U
5-3	1.4.2.3.5	TWR-10711	Test Report - Evaluation of the Forging for the SRM Housing, Nose/Inlet, Nozzle P/N 1U50084	08/28/78	2	U
5-3	1.4.2.3.5	TWR-10713	Test Report - Evaluation of the Forging for SRM Nozzle Forward End Ring, P/N 1U50085	12/10/76	2	U
5-3	1.4.2.3.5	TWR-10715 Rev A	Test Report - Evaluation of the Forging for the SRM Nozzle Cowl Housing, P/N 1U50088	06/22/78	2	U
5-3	1.4.2.3.5	TWR-10717	Test Report - Evaluation for the Forging for the SRM Nozzle Throat Support Housing, P/N 1U50087	03/08/77	2	U
5-3	1.4.2.3.5	TWR-10719	Test Report - Evaluation of the Cowl Housing SRM Nozzle, P/N 1U50086-2	02/24/77	2	U
5-3	1.4.2.3.5	TWR-10721	Test Report - Evaluation of the SRM Nozzle Compliance Ring, P/N 1U51844 (Formerly P/Ns 1U51241 and 1U50090)	07/12/79	2	U
5-3	1.4.2.3.5	TWR-10723 Amend 1	Test Report - Evaluation of the Forging for the SRM Nozzle Actuation Bracket, P/N 1U51242	09/08/78	2	U
5-3	1.4.2.3.5	TWR-10725	Test Report - Evaluation of the Forging for the SRM Nozzle Aft Exit Cone Shell, P/N 1U51243	08/21/79	2	U
5-3	1.4.2.3.5	TWR-10727	Test Report - Evaluation of the Forging for the SRM Bearing Shim	02/20/76	2	U
5-3	1.4.2.3.5	TWR-10733	Test Report - Evaluation of the Forging for the SRM Igniter Chamber	04/20/76	2	U
5-3	1.4.2.3.5	TWR-10735	Test Report - Evaluation of the Forging for the SRM Igniter Adapter, P/N 1U50278-04	07/25/78	2	U
5-3	1.4.2.3.5	TWR-10737 Rev A	Test Report - Evaluation of the Forging for the SRM Igniter Chamber, P/N 1U50279-06	03/10/78	2	U
5-3	1.4.2.3.5	TWR-10782 Rev A	Space Shuttle Ten-Shim (S/N 2) Subscale Flex Bearing Bench Test	02/28/76	2	U
5-3	1.4.2.3.6	TWR-10825	Test Report - SRM Igniter Propellant Hazard Evaluation Studies	12/23/76	2	U
5-3	1.4.2.3.6	TWR-10874	Space Shuttle SRM Ignition System Test Report, Hydrostatic Burst of Initiating Igniter Chamber	03/10/76	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-3	1.4.2.3.6	TWR-10878	Space Shuttle SRM Ignition System Test Report, Fabrication Verification Program, SRM Igniter Throat Insert	02/06/76	2	U
5-3	1.4.1.3.6	TWR-10880	Space Shuttle SRM Ignition System Test Report, Igniter Propellant Tailoring (TP-H1154)	03/04/76	2	U
5-3	1.4.2.3.9	TWR-11169	Test Report for Terminal Connector Evaluation and Strain Gage Environmental Proof Testing, STA-1	03/15/77	2	U
5-3	1.4.2.3.5	TWR-11252	Analysis of the Prototype Space Shuttle Flexible Bearing (S/N001) Characterization and Vectoring Endurance Bench Tests	10/29/76	2	U
5-3	1.4.2.3.5	TWR-11256	Test Report - Evaluation of the Forging for the SRM Nozzle Snubber Segment, P/N 1U51061	04/23/80	2	U
5-3	1.4.2.3.5	TWR-11258	Test Report - Evaluation of the Forging for the SRM Nozzle Ring Snubber Support, P/N 1U51063	09/18/78	2	U
5-3	1.4.2.3.5	TWR-11296	Analysis of the Prototype Space Shuttle Flexible Bearing (S/N 003) Characterization and Tensile Limit Bench Tests	12/01/76	2	U
5-3	1.4.2.3.6	TWR-11403	Test Report - SRM Igniter Development Igniter No. 1-5	Aug 77	2	U
5-3	1.4.2.3.6	TWR-11434	Test Report - Space Shuttle SRM Ignition System TP-H1178 Propellant Demonstration	06/08/77	2	U
5-3	1.4.2.4.5	TWR-11464	Test Report - Solid Rocket Motor Segment Shipping and Handling Ring Installation	07/22/77	2	U
5-3	1.4.2.3.6	TWR-11492	Space Shuttle SRM Ignition System Igniter Development Tests, Nos. 7,8, & 9 Test Report	09/16/77	2	U
5-3	1.4.2.3.5	TWR-11496	Analysis of the Development Space Shuttle Flexible Bearing (S/N 002) Acceptance Test	07/15/77	2	U
5-3	1.5.2.3.4	TWR-11501	TP-H1148 Propellant Mechanical Properties Determination	May 77	2	U
5-3	1.4.2.3.6	TWR-11559	Test Report for the Igniter Chamber and Adapter Assembly Hydroburst	01/16/78	2	U
5-3	1.4.2.3.6	TWR-11567	Final Report, Space Shuttle SRM Safety and Arming Device Prequalification Tests, Together with Appendix A, Vols I and II	08/30/77	2	U
5-3	1.4.2.4.5	TWR-11588	Hydroproof Test of Simulated Igniter Adapter Tool, P/N 2U65020	09/19/77	2	U
5-3	1.4.2.3.5	TWR-11633	Test Report - Analysis of the Development Space Shuttle Flexible Bearing (S/N 003) Acceptance Test	11/18/77	2	U
5-3	1.4.2.3.3	TWR-11664	Space Shuttle SRM Case Test Report	12/23/77	2	U
5-3	1.4.2.3.5	TWR-11701	Summary Report of the Hydroproof Pressure Test Results of the SRM Fixed Nozzle Housing	02/10/78	2	U



PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-3	1.4.2.3.6	TWR-11732	Space Shuttle SRM Ignition System Performance in DM-2	May 78	2	U
5-3	1.4.2.3.6	TWR-11817	Test Report on the Performance of Different Bolts and Lubricants	04/13/78	2	U
5-3	1.4.2.3.8	TWR-11855	Test Report - Bonding Material Selection for SRM DFI Instrumentation	07/27/76	2	U
5-3	1.5.2.3.10	TWR-11865	Space Shuttle SRB Actuator Verification Test Report	05/29/78	2	U
5-3	1.4.2.3.6	TWR-11889	Space Shuttle SRM Ignition System Igniter Development Test (LAT) No. 10 Test Report	06/08/78	2	U
5-3	1.4.2.3.3	TWR-11972	Test Report - Assessment of Fracture Toughness of the SRM Cylindrical Forgings	10/03/78	2	U
5-3	1.4.2.3.10	TWR-12051	SRB Structural Test STA-1 Motor Case, Set-Up II, Phases 3, 4, 6, 7 and Spaceial Tesst, Final Report	11/02/78	2	U
5-3	1.4.2.3.6	TWR-12056	S/A Acceptance Test Discrepancy Report	12/12/78	2	U
5-3	1.4.2.3.5	TWR-12118	Acceptance Test Report Space Shuttle Flexible Bearing 1U51060 S/N 0000004	03/03/79	2	U
5-3	1.4.2.3.8	TWR-12129	Modification of 7U51420-1 (CEC 4-395-0154) Transducer - Bell & Howell CEC Report No. 4-395-0154-1	05/05/77	2	U
5-3	1.4.3.8	TWR-12130	Qualification Test Report High Output Pressure Transducer, Type 4-395-XXX, Bell and Howell CEC Report No. QTR 10210-21C	03/03/69	2	U
5-3	1.4.2.3.6	TWR-12198	Final Report - Space Shuttle SRM Safety and Arming Device Qualification Tests	01/15/80	2	U
5-3	1.4.2.3.6	TWR-12200	Space Shuttle SRM Ignition System, Igniter Development Test (LAT) No. 11	Oct 79	2	U
5-3	1.4.2.3.6	TWR-12201	Space Shuttle SRM Ignition System, Igniter Development Test (LAT) No. 12	Oct 79	2	U
5-3	1.4.2.3.5	TWR-12246	Test Report for SRM Nozzle Protective Plug	05/07/79	2	U
5-3	1.4.2.3.5	TWR-12255	Test Report - Space Shuttle Flexible Bearing, 1U51060, S/N 0000002 (R2)	05/14/79	2	U
5-3	1.4.2.3.5	TWR-12264	Acceptance Test Report, Space Shuttle Flexible Bearing 1U51060, S/N 0000005	04/03/79	2	U
5-3	1.4.2.3.6	TWR-12310	SRM Ignition System Qualification Test Report	10/09/79	2	U
5-3	1.4.2.4.3	TWR-12343	Test Results for SRM Inert Forward Segment Coupling and Normal Railway Transportation Tests	05/20/79	2	U
5-3	1.4.2.3.10	TWR-12348 Addend 1	Test Report - Space Shuttle Solid Rocket Motor Development Motor Static Firings Test	10/22/79	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-3	1.4.2.3.5	TWR-12389	Acceptance Test Report, Space Shuttle Flexible Bearing, 1U51060 S/N 0000004 (Retest)	07/20/79	2	U
5-3	1.4.2.3.5	TWR-12405	Test Report - Space Shuttle Flexible Bearing, 1U51060, S/N 0000003 (R2)	08/01/79	2	U
5-3	1.4.2.3.8	TWR-12419	Test Report - Qualification Testing of 3-Axis Linear Accelerometer, Model 5618-1	12/22/78	2	U
5-3	1.4.2.3.8	TWR-12420	Test Report - Qualification Testing of 3-Axis Linear Accelerometer, Model 5618-2	06/28/79	2	U
5-3	1.4.2.3.8	TWR-12423	Test Report - Qualification Testing of Calorimeter, 1U51132 (Medtherm Corp Report 20-2038-1)	06/28/79	2	U
5-3	1.4.2.3.8	TWR-12424	Test Report - Qualification Testing of Probe, Thermocouple, 1U51133 (Medtherm Corp Rept 20-2038-2)	02/06/79	2	U
5-3	1.4.2.3.6	TWR-12433	Space Shuttle SRM Ignition System, Igniter Development Test (LAT) No. 13	Oct 79	2	U
5-3	1.4.2.3.5	TWR-12452 Rev A	Test Report - Qualification Testing of Nozzle Severance Ordinance Cable, P/Ns 1U51478-01, 1U51478-02	04/07/80	2	U
5-3	1.4.2.3.6	TWR-12494	Space Shuttle SRM S&A "Hot" Test Results	12/06/79	2	U
5-3	1.4.2.3.6	TWR-12521	SRB S&A Self-Check During SAIL, Testing Failure Report	11/06/79	2	U
5-3	1.4.2.3.8	TWR-12558	Qualification Test Report for Heat Flux Transducer 1U51797 (Medtherm Report No. 20-2240-1)	06/22/79	2	U
5-3	1.4.2.3.6	TWR-12562	Final Report - Sea Water Soak of Igniter Case	12/18/79	2	U
5-3	1.4.2.3.5	TWR-12574	Acceptance Test Report, Space Shuttle Flexible Bearing, 1U51060-08, S/N 0000001		2	U
5-3	1.4.2.3.5	TWR-12612	Acceptance Test Report, Space Shuttle Flexible Bearing 1U51060-08, S/N 0000002	03/14/80	2	U
5-3	1.4.2.3.8	TWR-12612	Acceptance Test Report, Space Shuttle Flexible Bearing 1U51060-08, S/N 0000002	03/14/80	2	U
5-3	1.4.2.3.5	TWR-12628	Acceptance Test Report, Space Shuttle Flexible Bearing 1U51060-0 S/N 0000004	06/06/80	2	U
5-3	1.4.2.3.5	TWR-12628	Acceptance Test Report, Space Shuttle Flexible Bearing 1U51060-0, S/N 0000004	06/06/80	2	U
5-3	1.4.2.3.10	TWR-12646	Test Report - Space Shuttle Solid Rocket Motor, Qualification Motor Static Firing Tests, Vol 1, Vol 2, Vol 3, and Vol 4		2	U
5-3	1.4.2.3.10	TWR-12646	Test Report - Space Shuttle Solid Rocket Motor, Qualification Motor Static Firing Tests, Vol 1, Vol 2, Vol 3, and Vol 4		2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-3	1.4.2.3.10	TWR-12646 Addend 1	Test Report - Space Shuttle Solid Rocket Motor, Qualification Motor Solid Firing Tests	06/03/81	2	U
5-3	1.4.2.3.10	TWR-12646 Addend 1	Test Report - Space Shuttle Solid Rocket Motor, Qualification Motor Solid Firing Tests	06/03/81	2	U
5-3	1.4.2.3.8	TWR-12660	Test Report - Qualification of Sensor Installations Specimens 1A & 1B through 8A & 8B (Wyle Laboratories Report No. 55393)	05/21/79	2	U
5-3	1.4.2.3.8	TWR-12660	Test Report - Qualification of Sensor Installations Specimens 1A & 1B through 8A & 8B (Wyle Laboratories Report No. 55393)	05/21/79	2	U
5-3	1.4.2.3.8	TWR-12661	Test Report - Qualification of Simulated Servoaccelerometers Specimens 1A & 1B (Wyle Laboratories Report No. 55524)	02/27/80	2	U
5-3	1.4.2.3.8	TWR-12661	Test Report - Qualification of Simulated Servoaccelerometers Specimens 1A & 1B (Wyle Laboratories Report No. 55524)	02/27/80	2	U
5-3	1.4.2.3.4	TWR-12678	Test Report Temperature Sensitivity for Space Shuttle SRM Propellant TP-H1148	07/11/80	2	U
5-3	1.4.2.3.4	TWR-12678	Test Report Temperature Sensitivity for Space Shuttle SRM Propellant TP-H1148	07/11/80	2	U
5-3	1.4.2.3.3.	TWR-12679	Final Test Report - SRB Structural Test STA-1 Motor Case Set-Up Phases 8, 9, 10, 11 and 12	04/01/80	2	U
5-3	1.4.2.3.3	TWR-12679	Final Test Report, SRB Structural Test STA-1 Motor Case Set-Up Phases 8, 9, 10, 11 and 12	04/01/80	2	U
5-3	1.4.2.3.6	TWR-12715	Test Report for Burning Rate Slope Temperature Sensitivity Determination for TP-H1178 Propellant	04/16/80	2	U
5-3	1.4.2.3.6	TWR-12715	Test Report for Burning Rate Slope Temperature Sensitivity Determination for TP-H1178 Propellant	04/16/80	2	U
5-3	1.4.2.3.3	TWR-12718	SRM Forward Dome Residual Stress Test Report	05/05/80	2	U
5-3	1.4.2.3.3	TWR-12718	SRM Forward Dome Residual Stress Test Report	05/05/80	2	U
5-3	1.4.2.3.3	TWR-12726	Final Test Report, SRB Structural Test STA-1 Motor Case Set-Up II, Phases 13, 13A and 18	04/14/80	2	U
5-3	1.4.2.3.3	TWR-12726	Final Test Report - SRB Structural Test STA-1 Motor Case Set-Up II, Phase 13, 13A and 18	04/14/80	2	U
5-3	1.4.2.3.3	TWR-12727	Final Test Report - SRM Structural Test STA-1 Motor Case Set-Up II, Phase 22 (Cavity Collapse)	05/15/80	2	U
5-3	1.4.2.3.3	TWR-12727	Final Test Report - SRM Structural Test STA-1 Motor Case Set-Up II, Phase 22 (Cavity Collapse)	05/15/80	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-3	1.4.2.3.8	TWR-12730	Voltage Transient and Burst Pressure Tests, Pressure Transducers, B&H P/Ns 4-395-0160, 4-395-0161 and Thiokol P/Ns 7U51420-01, 1U50188-07, -08, -09 (Bell & Howell CEC Report No. X09644)		2	U
5-3	1.4.2.3.8	TWR-12730	Voltage Transient and Burst Pressure Tests, Pressure Transducers, B&H P/Ns 4-395-0160, 4-395-0161, and Thiokol P/Ns 7U51420-01, 1U50188-07, -08, -09 (Bell & Howell CEC Report No. X09644)		2	U
5-3	1.4.2.3.5	TWR-12734	Acceptance Test Report, Space Shuttle Flexible Bearing 1U51060-01, S/N 0000004 (R1)	05/29/80	2	U
5-3	1.4.2.3.5	TWR-12734	Acceptance Test Report, Space Shuttle Flexible Bearing 1U51060-01, S/N 0000004 (R1)	05/29/80	2	U
5-3	1.4.2.3.5	TWR-12759	Acceptance Test Report, Space Shuttle Flexible Bearing, 1U51060-10, S/N 0000001	01/29/81	2	U
5-3	1.4.2.3.5	TWR-12759	Acceptance Test Report, Space Shuttle Flexible Bearing, 1U51060-10, S/N 0000001	01/29/81	2	U
5-3	1.4.2.3.6	TWR-12777	Space Shuttle SRM Igniter S&A Device Test Report, Preliminary NSI-I Redundant Seal Tests, CCC	08/01/80	2	U
5-3	1.4.2.3.6	TWR-12777	Space Shuttle SRM Igniter S&A Device Test Report, Preliminary NSI-I Redundant Seal Tests, CCC	08/01/80	2	U
5-3	1.4.2.3.6	TWR-12791	Space Shuttle SRM Ignition System Igniter Development (LAT) No. 15 Test Report	Aug 80	2	U
5-3	1.4.2.3.6	TWR-12791	Space Shuttle SRM Ignition System Igniter Development (LAT) No. 15 Test Report	Aug 80	2	U
5-3	1.4.2.3.3	TWR-12829	Space Shuttle SRM Lightweight Case Segment Joint Verification Test Analysis and Report	10/02/80	2	U
5-3	1.4.2.3.3	TWR-12829	Space Shuttle SRM Lightweight Case Segment Joint Verification Test Analysis and Report	10/02/80	2	U
5-3	1.4.2.3.8	TWR-12853	Qualification Test Report for CEC 4-395-0154 Pressure Transducer (TC P/N 1U50188-06) Bell and Howell CEC Report No. 4-395-0154	06/21/80	2	U
5-3	1.4.2.3.6	TWR-12866	Test Report - SRM Igniter Propellant Hazard Evaluation Studies on Cured TP-H1178 Propellant	11/31/80	2	U
5-3	1.4.2.3.3	TWR-12890	SRM Lightweight Cylinder Segment Burst Test Report	12/11/80	2	U
5-3	1.4.2.3.6	TWR-12891	Final Report for Full Scale Final Evaluation (Delta Qual) of the NSI Redundant Seal and Lot Acceptance of Lot AAB	Jan 81	2	U
5-3	1.4.2.3.6	TWR-12892 Rev A	Final Report Testing of Three Additional B-Bs from Lot AAB	Jan 81	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-3	1.4.2.3.6	TWR-12932 Amend 1	Final Report Space Shuttle SRM Safety and Arming Device Shipping and Storage Container	01/14/81	2	U
5-3	1.4.2.3.5	TWR-12942	Acceptance Test Report, Space Shuttle SRM Flexible Bearing, 1U51060-12, S/N 0000001	01/27/81	2	U
5-3	1.4.2.3.6	TWR-13002	Space Shuttle SRM Ignition System Igniter Development Test (LAT) No. 14 Test Report	Mar 81	2	U
5-3	1.4.2.3.6	TWR-13003 Rev A	Test Results and Analysis for the Space Shuttle Igniter Life Demonstration Program	09/16/82	2	U
5-3	1.4.2.3.2	TWR-13075	Postflight Evaluation of STS-1 SRM Components Returned to Morton Thiokol Corporation, Part V, Ignition System		2	U
5-3	1.4.2.3.6	TWR-13083	Space Shuttle SRM Ignition System Igniter Initiator Static Test Report	07/10/81	2	U
5-3	1.4.2.3.6	TWR-13102	Space Shuttle SRM Ignition System Igniter Development Test (LAT) No. 16 Test Report	Jul 81	2	U
5-3	1.4.2.3.5	TWR-13107	Test Report - Space Shuttle Flexible Bearing 1U51060-12, S/N 0000002	07/21/81	2	U
5-3	1.4.2.3.6	TWR-13175	Space Shuttle SRM Ignition System Demonstration Test Report	09/28/81	2	U
5-3	1.4.2.3.6	TWR-13218	Development Test Report for Modified NSI, Redundant Seal	04/12/82	2	U
5-3	1.4.2.3.6	TWR-13220	Final Report for the Full Scale Final Evaluation (Delta Qual) of the Initiator Redundant Seal and Lot Acceptance of Lot AAA	Dec 82	2	U
5-3		TWR-13228	Space Shuttle SRM Test Report, Redesigned Nozzle Severance System LSC Initiation Tests	07/01/88	2	U
5-3	1.4.2.3.5	TWR-13343	Test Report - Space Shuttle Flexible Bearing 1U51060, S/N 0000002R4	04/12/82	2	U
5-3	1.4.2.3.5	TWR-13358	Test Report - Space Shuttle Flexible Bearing 1U51060-07R, S/N 0000003R1	04/29/82	2	U
5-3	1.4.2.3.5	TWR-13370	Acceptance Test Report, Space Shuttle Flexible Bearing 1U51060-12 S/N 0000003	06/01/82	2	U
5-3	1.4.2.3.6	TWR-13413	Space Shuttle SRM Ignition System Development Test (LAT) No. 17 Test Report	Jun 82	2	U
5-3	1.4.2.3.5	TWR-13481	Acceptance Test Report, Space Shuttle Flexible Bearing 1U51060-01R S/N 0000004R2	08/13/82	2	U
5-3	1.4.2.3.5	TWR-13495	Acceptance Test Report, Space Shuttle Flexible Bearing 1U51060-07R S/N 0000001R2	08/13/82	2	U
5-3	1.4.2.3.6	TWR-13572	Space Shuttle SRM Ignition System Dual Seal Plug Test Report	Nov 82	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-3	1.4.2.3.10	TWR-13579	Test Report, Space Shuttle Solid Rocket Motor Development Motor No. 5 Static Firing Test	05/03/83	2	U
5-3	1.4.2.3.10	TWR-13618	Final Test Report for SRM Nozzle Protective Foam Plug	12/08/82	2	U
5-3	1.4.2.3.6	TWR-13619	Test Results and Analysis for the DM-5 and QM-4 Space Shuttle Igniters	06/24/83	2	U
5-3	1.4.2.3.6	TWR-13668	Space Shuttle SRM Ignition System Igniter Lot Acceptance Test (LAT) No. 18	02/15/83	2	U
5-3	1.4.2.3.5	TWR-13726	Acceptance Test Report Space Shuttle Flexible Bearing 1U51060-12 S/N 0000007	04/26/83	2	U
5-3	1.4.2.3.5	TWR-13744	Acceptance Test Report Space Shuttle Flexible Bearing 1U51060-10 S/N 0000002R1	04/26/83	2	U
5-3	1.4.2.3.10	TWR-13757	Test Report - Space Shuttle Solid Rocket Motor Qualification Motor No. 4 Static Firing Test	Jun 83	2	U
5-3	1.4.2.3.6	TWR-13818	Space Shuttle SRM Ignition System Igniter Lot Acceptance Test (LAT) No. 19 Test Report	May 23	2	U
5-3	1.4.2.3.10	TWR-13821	Space Shuttle SRM Nozzle Actuator Bracket Post-Test Strain Gage Analysis	05/19/83	2	U
5-3	1.4.2.3.5	TWR-13842	Space Shuttle SRM Test Report, Severance of the QM-4 Nozzle	Sept 83	2	U
5-3	1.4.2.3.5	TWR-13847	Test Report Space Shuttle Flexible Bearing 1U51060-10 S/N 0000003R1	06/28/83	2	U
5-3	1.4.2.3.5	TWR-13848	Acceptance Test Report Space Shuttle Flexible Bearing 1U51060-12 S/N 0000008	05/24/83	2	U
5-3	1.4.2.3.5	TWR-13853	Acceptance Test Report Space Shuttle Flexible Bearing 1U51060-12 S/N 0000004	12/03/82	2	U
5-3	1.4.2.3.5	TWR-13858	Acceptance Test Report Space Shuttle Flexible Bearing 1U51060 S/N 0000009	06/27/83	2	U
5-3	1.4.2.3.3	TWR-13873	SRM Case Corrosion Results	06/23/83	2	U
5-3	1.1.1.3	TWR-13958	Space Shuttle SRM Ignition System Igniter Lot Acceptance Test (LAT) No. 20 Test Report	Aug 83	2	U
5-3	1.1.1.3	TWR-13965	Acceptance Test Report Space Shuttle Flexible Bearing 1U51060-12 S/N 0000002R1		2	U
5-3	1.1.1.3	TWR-13996	Acceptance Test Report, Space Shuttle Flexible Bearing 1U51060-12 S/N 0000011	Sept 83	2	U
5-3	1.1.1.3	TWR-14051	Acceptance Test Report Space Shuttle Flexible Bearing 1U51060-12 S/N 0000003R1	10/31/83	2	U
5-3	1.1.1.3	TWR-14071	Test Report, SRM Nozzle Case Joint Filler Material Installation Test	11/16/83	2	U
5-3	FN301	TWR-14102 Rev B	Space Shuttle SRM Test Configuration Alignment and		2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-3	FN301	TWR-14123	Test Report - FWC-SRM Subscale Systems Tunnel Vibration Test (Misidentified as DR 5-6)	12/19/83	2	U
5-3	FN301	TWR-14137	Test Report, FWC-SRM Subscale Systems Tunnel Model Survey (Misidentified as DR 5-6)	01/11/84	2	U
5-3	1.1.1.2.3	TWR-14180	Space Shuttle SRM Ignition System Igniter Lot Acceptance Test (LAT) No. 21 Test Report	Jan 84	2	U
5-3	1.1.1.2.3	TWR-14181	Space Shuttle Flexible Bearing 1U51060-12 S/N 0000013	01/18/84	2	U
5-3	1.1.1.2.3	TWR-14196	Space Shuttle Flexible Bearing 1U51060-12 S/N 0000012	02/20/84	2	U
5-3	1.1.1.2.3	TWR-14245	Acceptance Test Report, Space Shuttle Flexible Bearing 1U51060-07, S/N 0000001R3	04/05/84	2	U
5-3	1.1.1.2.2	TWR-14250	Space Shuttle SRM Ignition System Igniter Lot Acceptance Test (LAT) No. 22	Feb 84	2	U
5-3	1.1.1.2.3	TWR-14251	Justification Report for Acceptance of Electro Magnetics Products as a Qualified Vendor for Field Windings	02/24/84	2	U
5-3	1.1.1.2.3	TWR-14278	Acceptance Test Report, Space Shuttle Flexible Bearing 1U51060-12, S/N 0000007R1	04/05/84	2	U
5-3	1.1.1.2.3	TWR-14312	Acceptance Test Report, Space Shuttle Flexible Bearing 1U51060-12, S/N 0000004R1	03/24/84	2	U
5-3	1.1.1.2.3	TWR-14379	SRM Ignition System Igniter Lot Acceptance Test (LAT) No. 23 Test Report	05/24/84	2	U
5-3	1.1.1.2.3	TWR-14425	Acceptance Test Report Space Shuttle Flexible Bearing 1U51060-12, S/N 0000005R1	06/21/84	2	U
5-3	1.1.1.2.3	TWR-14465	Acceptance Test Report Space Shuttle Flexible Bearing 1U51060-12 S/N 0000014	06/22/84	2	U
5-3	1.1.1.2.3	TWR-14474	STS-8A JPL-NS Nozzle Erosion Anomaly Investigation Static Test Report	07/09/84	2	U
5-3	1.1.1.2.3	TWR-14475	Space Shuttle Igniter-Case Joint Filler Material Installation	09/01/84	2	U
5-3	1.1.1.2.3	TWR-14524	Acceptance Test Report Space Shuttle Flexible Bearing, 1U51060-12 S/N 0000010R1	08/01/84	2	U
5-3	FN301	TWR-14614 Rev A	Space Shuttle FWC-SRM DM-06 Static Test Report Volume 1	Nov 85	2	U
5-3	FN301	TWR-14615-2	Space Shuttle FWC-SRM DM-7 Static Test Report Volume 2	Nov 85	2	U
5-3	FN301	TWR-14615-2 Addend	Addendum to Section 3.2.4.1, Nozzle Space Shuttle FWC-SRM DM-7 Static Test Report Volume 2	Nov 85	2	U
5-3	1.1.1.2.3	TWR-14628	Mounting Enclosure Effect on Resonant Frequency of Endevco 8510-5 Acoustic Transducer	09/18/84	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-3	FN301	TWR-14634	Space Shuttle SRM Actuator Length Determination for DM-7	03/26/85	2	U
5-3	1.1.1.2	TWR-14676	Final Report for Space Shuttle SRM Safe and Arming Device Ignition Granule Aging	July 85	2	U
5-3	1.1.1.2.3	TWR-14685 Rev A	Space Shuttle SRM Ignition System Igniter Lot Acceptance Test (LAT) No. 24 Test Report	Nov 84	2	U
5-3	1.1.1.2	TWR-14716	Acceptance Test Report, Space Shuttle Flexible Bearing 1U51060-01 S/N 000005R3		2	U
5-3	1.1.1.2	TWR-14765	Acceptance Test Report, Space Shuttle Flexible Bearing 1U51060-10, S/N 0000003R2	01/14/85	2	U
5-3	1.1.1.2	TWR-14770	Acceptance Test Report, Space Shuttle Flexible Bearing 1U61060-01, S/N 0000002R6	01/16/85	2	U
5-3	1.1.1.2	TWR-14782	Space Shuttle SRM Ignition System Igniter Lot Acceptance Test (LAT) No. 25 Test Report	Mar 85	2	U
5-3	1.1.1.2	TWR-14814	Acceptance Test Report Space Shuttle Flexible	02/06/84	2	U
5-3	1.1.1.2	TWR-14824	Space Shuttle SRM Ignition System Igniter Lot Acceptance Test (LAT) No. 26 Test Report	Mar 85	2	U
5-3	FN301	TWR-14859	Space Shuttle SRM Actuator Length Determination for QM-5	12/05/85	2	U
5-3	1.1.1.2	TWR-14918	Acceptance Test Report Space Shuttle Flexible Bearing 1U51060-01 S/N 0000003R5	03/25/85	2	U
5-3	1.1.1.2	TWR-14919	Acceptance Test Report Space Shuttle Flexible Bearing 1U51060-12 S/N 0000006R1	03/29/85	2	U
5-3	1.1.1.2	TWR-14922	Acceptance Test Report Space Shuttle Flexible Bearing 1U51060-12 S/N 0000008R1	04/01/85	2	U
5-3	1.1.1.2	TWR-14942	Space Shuttle Improved Materials and Ply Angle Evaluation Nozzle Static Test Report (JPL N-7)		2	U
5-3	1.1.1.2	TWR-14968	Acceptance Test Report Space Shuttle Flexible Bearing 1U51060-12 S/N 0000009R1		2	U
5-3	1.1.1.2	TWR-15064	Acceptance Test Report Space Shuttle Flexible Bearing 1U51060-12 S/N 0000016		2	U
5-3	1.1.1.2	TWR-15077 Rev A	Acceptance Test Report Space Shuttle Flexible Bearing 1U51060-12 S/N 0000004R2		2	U
5-3	1.1.1.2	TWR-15089	Space Shuttle SRM Ignition System Igniter Lot Acceptance Test (LAT)	Dec 85	2	U
5-3	1.1.1.2	TWR-15100	Acceptance Test Report Space Shuttle Flexible Bearing 1U51060-12 S/N 0000013R1		2	U
5-3	FN301	TWR-15136	FWC-SRM Subscale Systems Tunnel Acoustic Test Report	02/21/84	2	U



PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-3	1.1.1.2	TWR-15199	Space Shuttle SRM Ignition System Igniter Lot Acceptance Test (LAT) No. 28	Feb 86	2	U
5-3	HQ301	TWR-15207 Rev A	Acceptance Test Report Space Shuttle Flexible Bearing 1U51060-01 S/N 0000004R4		2	U
5-3	HQ301	TWR-15290 Rev A	Acceptance Test Report Space Shuttle Flexible Bearing 1U51060-07 S/N 0000011R4		2	U
5-3	HQ301	TWR-15294 Rev A	Acceptance Test Report Space Shuttle Flexible Bearing 1U51060-12 S/N 0000011R1		2	U
5-3	FN301	TWR-15318	FWC Corrosion Test Report	10/15/85	2	U
5-3	1.1.1.2	TWR-15319	Acceptance Test Report Space Shuttle Flexible Bearing 1U51060-12 S/N 0000010R2	11/15/85	2	U
5-3	1.1.1.2	TWR-15352	Acceptance Test Report Space Shuttle Flexible Bearing 1U51060-12 S/N 0000005R2	11/20/85	2	U
5-3	1.1.1.2	TWR-15365	Space Shuttle SRM Ignition System Igniter Lot Acceptance Test (LAT) No. 30 Test Report	Apr 86	2	U
5-3	1.1.1.2	TWR-15372	Acceptance Test Report Space Shuttle Flexible Bearing 1U51060-10 S/N 0000002R3	12/03/85	2	U
5-3	1.1.1.2	TWR-15375	Space Shuttle SRM Ignition System Igniter Lot Acceptance Test (LAT) Test Report No. 28	12/10/85	2	U
5-3	1.1.1.2	TWR-15382	Acceptance Test Report Space Shuttle Flexible Bearing 1U51060-12 S/N 0000002R3	12/10/85	2	U
5-3	1.1.1.2	TWR-15429	Space Shuttle SRM Ignition System Igniter Lot Acceptance Test (LAT) No. 31 Test Report	06/24/86	2	U
5-3	1.1.1.2	TWR-15509	Acceptance Test Report Space Shuttle Flexible Bearing 1U51060-12 S/N 0000020		2	U
5-3	HQ301	TWR-15520	Five-Year Aging of TP-H1148 Propellant and the Insulation/Liner/Propellant Interface	09/30/88	2	U
5-3	1.1.1.2	TWR-15529	Acceptance Test Report Space Shuttle Flexible Bearing 1U51060-12 S/N 0000007R2		2	U
5-3	1.1.1.2	TWR-15628	Acceptance Test Report Space Shuttle Flexible Bearing 1U51060-12 S/N 0000008R2	03/01/86	2	U
5-3	HQ301	TWR-15756	Joint Environment Simulator 1A (JES 1A) Final Test Report	10/14/86	2	U
5-3	HQ301	TWR-15809	Test Report of Methyl Chloroform Reaction on D6AC Steel	09/10/87	2	U
5-3		TWR-15817	Test Results of EA-946 Bond Enhancement Studies	11/17/88	2	U
5-3	HQ102	TWR-15846	Space Shuttle SRM Ignition System Igniter Lot Acceptance Test (LAT) No. 32 Test Report	Sept 86	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-3	HQ301	TWR-15861	Space Shuttle SRM Nozzle Aft Case Joint Cold Flow Test	10/24/86	2	U
5-3	HP102	TWR-15896 Rev A	Acceptance Test Report Space Shuttle Flexible Bearing 1U51060 S/N 0000004R3		2	U
5-3	HQ301	TWR-16102	Igniter Nozzle Insert Burst Test Report	03/11/88	2	U
5-3	HQ301	TWR-16103	Igniter Nozzle Insert Shear Test Report	03/11/88	2	U
5-3	HQ301	TWR-16106	SRM-3224 Liner/SRM Igniter Qualification (26-233K Accelerated Aging)	04/25/88	2	U
5-3	HQ301	TWR-16109	Final Test Report, Joint Environment Simulator 1B (JES-1B)	04/09/87	2	U
5-3	HQ301	TWR-16133	SRM Joint Deflection Referee 2A (Composite Overwrap) Test Report	02/27/87	2	U
5-3	HQ301	TWR-16134	SRM Joint Deflection Referee 2B-II, Preformed Composite Overwrap Final Test Report	June 87	2	U
5-3	HQ301	TWR-16135	SRM Joint Deflection Referee 2B-II, Preformed Composite Overwrap Final Test Report	June 87	2	U
5-3	HQ301	TWR-16202	Report on Impace Loading of Inner Clevis Leg During SRM Case Assembly	01/23/87	2	U
5-3	HQ301	TWR-16205	SRM Case Assembly and Hydroproof Qualification (Referree 3A, Hydroproofs 6, 7, and 8) Final Test Report	May 87	2	U
5-3	HQ301	TWR-16239	Nozzle Joint Environment Simulator (NJES) H-1 Final Test Report	June 87	2	U
5-3	HQ301	TWR-16305	Final Test Report SRM Case Field Joint Assembly Demonstrations (JAD-1B)	May 87	2	U
5-3		TWR-16399	NDT Elastomeric Couplant Screening	09/01/88	2	U
5-3	HQ301	TWR-16432	First Interim Test Report of the Fracture Mechanics Testing of the RSRM Factory Joint Leak Check Port	09/01/88	2	U
5-3	HQ405	TWR-16456	J-Joint Bondline Inspection Tool (JBIT) Certification Test, Final Report	Sept 88	2	U
5-3	HQ301	TWR-16458	Factory Joint Resiliency Testing, Final Report	09/29/88	2	U
5-3	HQ301	TWR-16478	Space Shuttle SRM GTM-4 Center Segment Modal Survey Test	04/02/87	2	U
5-3	HQ301	TWR-16480	Space Shuttle Center Segment Modal Survey Test (MS No. 2, MS No. 3) Model Correlation	11/13/87	2	U
5-3	HQ301	TWR-16494	Leak Test of STA-3 Forward Segment Capture Feature Joint	03/25/87	2	U
5-3	HQ301	TWR-16501	Joint Environment Simulator 3A (JES-3A) Final Test Report	Sept 87	2	U
5-3	HQ301	TWR-16521	Final Test Report Field Joint Assembly Fixture (FJAF) Installation	05/29/87	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-3	HQ301	TWR-16533	Joint Environment Simulator 2A (JES-2A) Final Test Report	June 87	2	U
5-3	HQ301	TWR-16534	Joint Environment Simulator 3B (JES-3B) Final Test Report (Vol 1)	Jan 88	2	U
5-3	HQ301	TWR-16540	Nozzle Plug High Rate Pressurization Test Report	04/11/88	2	U
5-3	HQ301	TWR-16542	RSRM Nozzle Foam Plug High Rate Pressurization Qualification Final Test Report	05/16/88	2	U
5-3	HQ301	TWR-16551	Space Shuttle SRM Ignition System Modified Igniter Lot Acceptance Test (LAT) No. 37 Test Report	Nov 87	2	U
5-3	HQ301	TWR-16573	Joint Environment Simulator 2B (JES-2B) Final Test Report	June 87	2	U
5-3	HQ301	TWR-16606	Test Results for the NJES H-24 Hydroproof Test (Supplement to TWR-16656)	06/08/87	2	U
5-3	HQ301	TWR-16607	Test Results for the NJES H-3B Hydroproof Test	09/23/87	2	U
5-3	HQ301	TWR-16628	Nozzle Joint Assembly Demonstration (NJAD) Final Test Report	Aug 87	2	U
5-3	HQ301	TWR-16655	Nozzle Joint Environment Simulator (NJES) H-2A Final Test Report	Sept 86	2	U
5-3	HQ301	TWR-16656	Nozzle Joint Environment Simulator (NJES) H-2B Final Test Report	June 87	2	U
5-3	HQ302	TWR-16657 Rev A Vols 1 and 2	Space Shuttle Engineering Test Motor 1A (ETM-1A) Final Test Report	Feb 89	2	U
5-3	HQ301	TWR-16658	Space Shuttle Development Motor No. 8 (DM-8) Final Test Report (Vol 1)	10/19/87	2	U
5-3	HQ301	TWR-16707	Space Shuttle SRM Ignition System Igniter Lot Acceptance Test (LAT) No. 34 Test Report	Au 87	2	U
5-3	HQ301	TWR-16708	Space Shuttle SRM Ignition System Igniter Lot Acceptance Test (LAT) No. 35 Test Report	Aug 87	2	U
5-3	HQ301	TWR-16735	Space Shuttle Ignition System Igniter Log Acceptance Test (LAT) No. 36 Test Report	Aug 87	2	U
5-3	HQ301	TWR-16752 Rev A	Structural Test Article 3 (STA-3) Final Test Report	08/05/88	2	U
5-3	HQ301	TWR-16752 Vol 1	Structural Test Article 3 (STA-3) Final Test Report	07/20/88	2	U
5-3	HQ301	TWR-16755	Nozzle Joint Environment Simulator (NJES) 2-A Final Test Report	10/09/87	2	U
5-3	HQ301	TWR-16757	Structural Results for the Nozzle Joint Environment Simulator (NJES-1A) Test	09/22/87	2	U
5-3	HQ301	TWR-16768	Joint Assembly Demonstration 2 (JAD-2) Final Test Report	July 87	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-3	HQ301	TWR-16807	Nozzle Joint Assembly Environment Simulator (NJES) 1A Final Test Report	July 87	2	U
5-3	HQ301	TWR-16818	Interim Long Term Resilience Testing Report	09/22/87	2	U
5-3	HQ301	TWR-16829	Assembly Test Article (ATA) Final Test Report Volume 1	02/22/88	2	U
5-3	HQ301	TWR-16833	STA-3 Instrumentation Installation Final Test Report	Dec 87	2	U
5-3	HQ301	TWR-16844	Four-Hundred-Pound Charge (FHPC) 24-Inch Diameter Motor Circumferential Flow Test Final Test Report (Vol 1)	Mar 88	2	U
5-3	HQ301	TWR-16851	Fungus Resistance of Aluminum Systems Tunnel Materials Final Test Report		2	U
5-3	HQ301	TWR-16864	Test Report Flex Plate Test	11/06/87	2	U
5-3	HQ301	TWR-16888	SRM Insulation Edge Debond Evaluation (The Effects of Conoco HD02 and Texaco AFB-2 Grease Contamination on D6AC Steel/NBR Bonding)	10/15/87	2	U
5-3	HQ301	TWR-16902	O-Ring Stretch Versus Cross Section Test Report	12/10/87	2	U
5-3	4B102	TWR-16940 Rev C	RSRM Ballistics Performance Assessment	07/14/88	2	U
5-3		TWR-16942	Test Report 1.4 Times MEOP Hydroproof Test	08/01/88	2	U
5-3	HQ301	TWR-16960 Rev A	ETM-1A Structural Test Report	10/28/87	2	U
5-3	HQ301	TWR-16968	HPM Nozzle Nose Inlet Housing Structural Test Final Test Report	Oct 87	2	U
5-3	HQ301	TWR-16977	ETM-1 Disassembly Inspection Structural Report	09/02/87	2	U
5-3	HQ301	TWR-16979	Field Joint Assembly Fixture Installation Kennedy Space Center Final Test Report	Oct 87	2	U
5-3	HQ301	TWR-16981	Pathfinder (TPTA) Final Test Report (Vol 1)	Nov 87	2	U
5-3	FN301	TWR-16991	Final Test Report on STA-2A Space Shuttle Filament Wound Case Solid Rocket Booster	09/28/87	2	U
5-3	FN301	TWR-16992	Final Test Report on VLS-1 Assembly at Vandenburg Launch Site	09/28/87	2	U
5-3	HQ301	TWR-17002	Structural Results for the Nozzle Joint Environment Simulator 2A (NJES-2A) Test	07/27/88	2	U
5-3	HQ301	TWR-17010-2	Final Report on SRM Chemlok Application Process Verification	Apr 88	2	U
5-3	HQ301	TWR-17011	Nozzle Joint Environment Simulator 2B (NJES-2B) Final Test Report	Nov 87	2	U
5-3	HQ301	TWR-17066 Rev A	DM-8 RSRM Structural Test Report	02 27 89	2	U
5-3	HQ301	TWR-17070	SRM Insulation/Case Bond Integrity Case Rubber Layup and Cure Process Verification		2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-3	HQ301	TWR-17098	Test Report - Joint Heater Thermal Conductive Adhesive		2	U
5-3	HQ301	TWR-17186	Thermal Cycling Test on Composite-Overwrap Bonded to Full Scale Solid Rocket Motor Segment Final Test Report		2	U
5-3	HQ301	TWR-17190 Rev B	Test Report 3-Joint Resiliency Test	03/13/89	2	U
5-3		TWR-17190 Rev A	Test Report 3-Joint Resiliency Test	11/01/88	2	U
5-3	HQ301	TWR-17200	Nozzle/Case Joint Radial Bolt (1U75167) Engineering Tests	Feb 88	2	U
5-3	HQ301	TWR-17202	Report of Button Pull Test to Verify Inspection of Case/Insulation Bondline	12/14/87	2	U
5-3		TWR-17224	Structural Results for the Nozzle Joint Environment Simulator 3A (NJES-3A) Test	Oct 88	2	U
5-3	HQ301	TWR-17226	DM-8 Systems Tunnel Aluminum Floor Plate Pull Test, Final Test Report	02/12/88	2	U
5-3	HQ301	TWR-17227	Test Report Systems Tunnel Ground Strap Bondline Aging	06/21/88	2	U
5-3	HQ301	TWR-17228	DM-9 Systems Tunnel Aluminum Floor Plate Pull Test Final Test Report	04/18/88	2	U
5-3	4B102	TWR-17230	Cork Extrusion Mechanical Characterization Final Test Report	07/11/88	2	U
5-3	HQ301	TWR-17231	DM-9 Pull Test Report	08/05/88	2	U
5-3	HQ301	TWR-17242	Moisture Seal Qualification Test Final Test Report	Feb 88	2	U
5-3	4B102	TWR-17243 Rev A	Final Test Report Wind Tunnel Testing of the SRM Field and Factory Joints Including Heater Cables and Cable Connectors	08/24/88	2	U
5-3	HQ301	TWR-17268	DM-8 Insulation Component Evaluation Final Test Report	04/12/88	2	U
5-3	HQ301	TWR-17269	DM-9 Post Fire Joint Disassembly Seal Component Interim Report (Vol 4)	02/08/88	2	U
5-3		TWR-17270 Vol 1	QM-6 Postfire Hardware Evaluation Final Report System Overview	10/20/88	2	U
5-3	HQ301	TWR-17271 Vol 1	QM-7 Postfire Hardware Evaluation Final Report System Overview	11/11/88	2	U
5-3	HQ301	TWR-17276	Factory Joint Seal Integrity	08/01/88	2	U
5-3	HQ301	TWR-17280	Igniter Gasket Resiliency Test Report	08/30/88	2	U
5-3		TWR-17364	Test Results of ETP-0176 "Test Plan of Determining the Sealability of Leak Check Port Plug"	06/21/88	2	U
5-3	HQ301	TWR-17371	Space Shuttle Development Motor No. 9 (DM-9) Final Test Report (Vol 1, Vol 2)	03/15/88	2	U
5-3	HQ301	TWR-17372	Space Shuttle Qualification Motor No. 6 (QM-6) Final Test Report	06/19/88	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-3	HQ301	TWR-17373	Space Shuttle Qualification Motor No. 7 (QM-7) Final Test Report, Volumes 1 and 2	08/15/88	2	U
5-3	HQ301	TWR-17373 Vol 1	Space Shuttle Qualification Motor No. 7 (QM-7) Final Test Report	08/15/88	2	U
5-3	HQ301	TWR-17453	Nozzle Joint Environment Simulator 3B (NJES-3B) Final Test Report	06/29/88	2	U
5-3	HQ301	TWR-17463	Nozzle Joint Environment Simulator 3A (NJES-3A) Final Test Report	04/24/88	2	U
5-3	HQ301	TWR-17469 A	Nozzle Joint Environment Simulator (NJES) H-3 Final Test Report, Addendum A	June 1989	2	U
5-3	HQ301	TWR-17526 Vol 1	RSRM Nose Inlet Housing Structural Test, Final Test Report	07/01/88	2	U
5-3	HQ301	TWR-17529	Structural Test Results of the SRM Hardware Interference Fit Assembly)	May 88	2	U
5-3	HQ301	TWR-17563	Transient Pressure Test Article (TPTA) 2.1 Final Test Report, Vol 1	05/16/88	2	U
5-3	HQ301	TWR-17588	SRM Nozzle Flex Bearing Boot Loads Test Report, Volumes I and II	09/01/88	2	U
5-3	HQ302	TWR-17592 Vol 1 Rev B	Space Shuttle Production Verification Motor 1 (PV-1) Static Fire Final Test Report	Aug 1989	2	U
5-3	HQ302	TWR-17592 Vol 3	Space Shuttle Production Verification Motor (PV-1) Static Test Final Test Report	10/10/88	2	U
5-3	HQ301	TWR-17609	Test Report Pressure Sensitive Adhesive Aging Test	02/15/88	2	U
5-3	FN301	TWR-17748	Final Report for STA-2A NDT Testing		2	U
5-3	HQ301	TWR-17750 Rev A	Defect Detection Requirements and Rejection Criteria for RSRM O-Rings, Final Test Report	04/05/88	2	U
5-3		TWR-17795 Vol 1	Operational Pressure Transducer Overpressure Test, Final Report	09/02/88	2	U
5-3	HQ301	TWR-17830 Rev B	Ultrasonic Bolt Gage Qualification (PDX 934-01) Final Test Report	July 1989	2	U
5-3	HQ301	TWR-17849	Acceptance Test Report, Space Shuttle Flexible Bearing, 1U51060-12, S/N 0000006R2	12/16/87	2	U
5-3	HQ301	TWR-17850	Acceptance Test Report, Space Shuttle Flexible Bearing, 1U51060-12, S/N 0000009R2	12/16/87	2	U
5-3	HQ301	TWR-17851	Acceptance Test Report, Space Shuttle Flexible Bearing, 1U51060-12, S/N 0000014R1	12/16/87	2	U
5-3	HQ301	TWR-17852	Acceptance Test Report, Space Shuttle Flexible Bearing, 1U51060-12, S/N 0000016R1	12/16/87	2	U
5-3	HQ301	TWR-17853	Acceptance Test Report, Space Shuttle Flexible Bearing, 1U51060-12, S/N 0000022	12/16/87	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-3	HQ301	TWR-17854	Acceptance Test Report, Space Shuttle Flexible Bearing, 1U51060-12, S/N 0000023	12/16/87	2	U
5-3	HQ301	TWR-17872	Modified Igniter Qualification Testing Program, Final Test Report	08/31/88	2	U
5-3	HQ301	TWR-17922	Igniter Joints Leak Test Report	03/25/88	2	U
5-3		TWR-17923	Safe and Arm Rotor Shaft O-Rings Test Report	06/29/88	2	U
5-3	HQ301	TWR-17924	Test Report Insulation to Case Edge Separation Repair Adhesive Screening	02/29/88	2	U
5-3	HQ301	TWR-17927	Transient Pressure Test Article (TPTA) 1.1 and 1.1A Final Test Report (Vol 1)	Jan 88	2	U
5-3	HQ301	TWR-17932	70-lb Charge (SPC) Subscale Motor, Full-Scale Thickness SRM Joint (Phase II)	03/09/88	2	U
5-3	HQ301	TWR-17941	Space Shuttle SRM Ignition System Modified Igniter Lot Acceptance Test (LAT) No. 38 Test Report	Feb 88	2	U
5-3	HQ301	TWR-17948	Acceptance Test Report, Space Shuttle Flexile Bearing, 1U51060-12, S/N 0000007R3	01/26/88	2	U
5-3	HQ101	TWR-17949 Rev A	STA-3 Liftoff Test No. 4 Aft ET Attach, Quicklook Report	08/09/88	2	U
5-3	HQ301	TWR-17950 Rev A	STA-3 Test 2 Aft ET Attach Influence Loads with Internal Pressure	08/23/88	2	U
5-3	HQ301	TWR-17960	PMD-Pi Tape Referee Shim Test (WTP-0143A)	01/25/88	2	U
5-3	HQ301	TWR-17974	Redesigned Solid Rocket Motor (RSRM) Assembly Test Article (ATA) Structural Test Report	02/16/88	2	U
5-3	HQ301	TWR-17993 Rev A	STA-3 Test 1 Aft ET Attach Influence Loads without Internal Pressure "Quicklook" Report	08/16/88	2	U
5-3	HQ301	TWR-17998	Report for Aging Studies to Determine the Effects of Isopropanol/Distilled Water Exposure on NBR Final Report	Oct 88	2	U
5-3	HQ301	TWR-18000	Joint Environment Simulator (JES-3C), Final Test Report	09/23/88	2	U
5-3	HQ301	TWR-18004	Pathfinder Exit Cone Severance Test Report	02/10/88	2	U
5-3		TWR-18009	Pathfinder Assembly Evaluation of Adhesive and Outer Boot Ring/Cowl Replacement Final Report	06/07/88	2	U
5-3	HQ301	TWR-18016	Test Results of RSRM Nozzle Flex Bearing Chemlok 233 Specimen	04/05/88	2	U
5-3	HQ301	TWR-18037	DM-9 Postfire Disassembly Insulation Component Evaluation Interim Report	01/25/88	2	U
5-3	48601	TWR-18045	Flight Readiness Firing (FRF) Final Report	10/10/88	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-3	HQ401	TWR-18064	Final Test Report for Nozzle Concentricity Gage	04/16/88	2	U
5-3	HQ301	TWR-18068	Test Report for Certification of Leak Test Equipment	03/15/88	2	U
5-3		TWR-18069	Pi Tape - Profile Measuring Device Referee Test Final Report	07/04/88	2	U
5-3	HQ301	TWR-18075 Vol 1	Transient Pressure Test Article (TPTA) 1.2 Final Test Report	04/08/88	2	U
5-3	48102	TWR-18085	DFI/OFI/OEI Cable Assembly Acceptance Test Report	08/15/88	2	U
5-3	HQ301	TWR-18114	Test Report Grease Contaminated Carbon Phenolic Tensile Adhesion Strength	03/03/88	2	U
5-3	HQ301	TWR-18135 Rev A	DM-9 RSRM Structural Test Report	06/30/88	2	U
5-3		TWR-18151-1	Effects of Methyl Chloroform and Mek on Chemlok-to-NBR Bond Integrity, Final Report	Sept 88	2	U
5-3	HQ301	TWR-18172	Acceptance Test Report Space Shuttle Flexible Bearing 1U51060-01, S/N 0000004R5	Mar 88	2	U
5-3	HQ301	TWR-18180	Outer Boot Ring/Cowl Refurbishment Bond	06/20/88	2	U
5-3	HQ301	TWR-18181	Test Results SRM Field Joint Protection System Kevlar Strap	03/28/88	2	U
5-3	HQ301	TWR-18194	Test Report on Results of Test Plan for Determining Safety Factor of Air Load Inspection	04/04/88	2	U
5-3	HQ301	TWR-18209	Test Report EA 934-NA Pot Life	Apr 88	2	U
5-3	HQ301	TWR-18219	SRM Rail Shipment Cover Lightning Final Test Report	03/29/88	2	U
5-3		TWR-18222	Nozzle/Case Joint Adhesive Development Test Report Phase I	09/21/88	2	U
5-3	HQ301	TWR-18228	Vent Port Plug Leak Test Fixture Final Test Report	05/18/88	2	U
5-3	HQ301	TWR-18231	Test Report UF-3296 Silance Primer Replacement with an Off-the-Shelf Primer	05/09/88	2	U
5-3	HQ301	TWR-18254	Space Shuttle SRM Ignition System Modified Igniter Lot Acceptance Test (LAT) No. 39 Test Report	May 88	2	U
5-3	HQ301	TWR-18305	Extruded Cork/EA-934NA/KL-60-225-EPDM Rubber Bondline Testing	03/30/88	2	U
5-3	HQ301	TWR-18306	Effect of Low Temperature and High Humidity on the Cure of STW5-2813 (DC 90-006-02) Sealant Final Report	04/06/88	2	U
5-3		TWR-18316	The Results of Hydrotest for Bushed Pin Holes	08/01/88	2	U
5-3		TWR-18359	Test Report on the Effect of O-Ring Squeeze on Barrier-Booster Rotor Torque	07/12/88	2	U
5-3	HQ301	TWR-18363	T-97 Side Load Servoactuator System Checkout and Development	04/29/88	2	U



PART 1

DR NO. ==	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-3		TWR-18394	LSC Molded Ring Retainer Test Report	07/30/88	2	U
5-3	HQ301	TWR-18441	Effect of Process Variables on EPDM/D6AC Bond Integrity Final Report	Oct 88	2	U
5-3	HQ301	TWR-18441	Effect of Process Variables on EPDM/D6AC Bond Integrity Final Report	11/01/88	2	U
5-3	HQ301	TWR-18447	Test Report Temperature and Humidity Effects on Silane Primer Bonds	08/03/88	2	U
5-3	HQ301	TWR-18480	FJPS Moisture Seal Characterization Test Results		2	U
5-3	B1101	TWR-18530	RSRM Nozzle Bolts Torque Versus Preload Testing	10/12/88	2	U
5-3	HQ301	TWR-18532	Acceptance Test Report Space Shuttle Flexible Bearing, 1U52840-03, S/N 000008R1	06/16/88	2	U
5-3	HQ301	TWR-18532	Acceptance Test Report Space Shuttle Flexible Bearing 1U52840-03, S/N 000008R1	08/23/88	2	U
5-3	4B102	TWR-18537	Pressure Sensitive Adhesive Bonding on Hypalon Polysulfide Painted Surfaces	11/22/88	2	U
5-3	4B102	TWR-18541	Test Report Bonding EPDM (053A) Rubber to Chopped Silica Phenolic	06/17/88	2	U
5-3		TWR-18545	Test Report Paint Stripper Surface Contamination Study	06/17/88	2	U
5-3	HQ301	TWR-18573	Acceptance Test Report Space Shuttle Flexible Bearing 1U52840-03 S/N00000011	July 88	2	U
5-3	4B601	TWR-18577	Redesigned Solid Rocket Motor 360L001 and Seal Leak Results	07/05/88	2	U
5-3	4B102	TWR-18587	O-Ring Common Surface Area During Leak Testing - Test Results	10/06/88	2	U
5-3	HQ301	TWR-18624	Transient Pressure Test Article 1.3 (TPTA 1.3) Final Test Report	10/26/88	2	U
5-3		TWR-18624 Vol 1	Transient Pressure Test Article 1.3 (TPTA 1.3) Final Test Report	10/27/88	2	U
5-3		TWR-18649	Test Report Grease Contaminated Carbon Phenolic Tensile Adhesion Strength Aging Study	07/13/88	2	U
5-3		TWR-18684	Acceptance Test Report Space Shuttle Flexible Bearing 1U52840-03 S/N 0000004R1	07/21/88	2	U
5-3	HQ301	TWR-18704	Acceptance Test Report Space Shuttle Flexible Bearing 1U52840-03 S/N 0000012R3	07/28/88	2	U
5-3	HQ501	TWR-18706	T-97 SRM Static Test Facility Evaluation, Final Test Report	08/30/88	2	U
5-3	HQ403	TWR-18708	RSRM Segment/Railcar Scanner Test Report	Sept 88	2	U
5-3	HQ301	TWR-18748	Acceptance Test Report Space Shuttle Flexible Bearing 1U52840-01, S/N 0000001	08/18/88	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-3	HQ301	TWR-18757	Long Term Resiliency Testing, Final Report	09/07/88	2	U
5-3	HQ301	TWR-18795	Second Flight Redesigned Solid Rocket Motor (360L002) Seal Leak Test Results	10/26/88	2	U
5-3	48102	TWR-18826	Testing to Qualify the New Blending Building at Kerr-McGee for the SRM Program	10/06/88	2	U
5-3	HQ301	TWR-18835	Program Plan Systems Tunnel Paint Stripping Process	10/13/88	2	U
5-3		TWR-18994	Lot Acceptance Test Report for 1U51703 Lot AAC Pyrotechnic Basket Assembly	Dec 88	2	U
5-3		TWR-300007	SRM Frozen Field Joint Test Report	04/02/86	2	U
5-3		TWR-300027	Engineering Study of Port Plug Installation	02/27/86	2	U
5-3		TWR-300049	STS-51L Investigation O-Ring Resiliency Test		2	U
5-3		TWR-300085	SRM Joint Deflection Referee Test Report	04/02/86	2	U
5-3		TWR-300105	Hot O-Ring Extrusion Test - Final Report	04/02/86	2	U
5-3		TWR-300139	Static O-Ring Resiliency Testing Report	04/01/86	2	U
5-3		TWR-300144	70-lb Motor, Full Cross Section Field Joint Tests		2	U
5-3		TWR-300149	SRM Joint Deflection Referee Test Phase 2 Final Report	04/02/86	2	U
5-3		TWR-300150	Dynamic Vacuum Putty Extrusion Test		2	U
5-3		TWR-300151 Rev A	Action Item SRMTF-01-31-014, MSFC 108	04/24/86	2	U
5-3		TWR-300152	O-Ring Dynamic Blow-by Test - Interim Release	04/02/86	2	U
5-3		TWR-300153	Sharp O-Ring Groove Edge Test - Final Report	04/02/86	2	U
5-3		TWR-300154	Cold O-Ring Extrusion Test	04/11/86	2	U
5-3		TWR-300155	O-Ring Contamination Leak Check Test	04/15/86	2	U
5-3		TWR-300156	Short Stack O-Ring Assembly Damage Test	04/02/86	2	U
5-3		TWR-300165	Space Shuttle Characterization of Fluorocarbon O-Ring Rubber		2	U
5-3		TWR-300179	Summary Report, 70-lb Motor Joint Tests 7C, 8A, 8B, and 9D		2	U
5-3		TWR-300183	Dynamic Vacuum Putty Extrusion Test Results		2	U
5-3		TWR-300189	Dynamic Vacuum Putty Extrusion Final Report SRMTF-01-014, MSFC 0105	04/25/86	2	U
5-3		TWR-300203	MT1 117 O-Ring Dynamic Blow-By Contamination Test	04/25/85	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-6	1.4.2.3.10		Checkout and Refurbishment Plan for Space Shuttle Static Test Motors Aft Skirt in Building M-67	06/04/84	2	U
5-6	1.1.1.2	ATP-0001	Acceptance Test Procedure, Lot Acceptance of 1U51703-01 Pyrotechnic Basket Assembly, Space Shuttle SRM	May 86	2	U
5-6	HQ301	ATP-0005 Rev A	Acceptance Test Procedure STA-3 Instrumentation Cable Assembly 2000 PSIG	Oct 87	2	U
5-6	HQ301	CTP-0006 Rev A	Transient Pressure Test Article (TPTA) 1.1 Test Plan	11/02/87	2	U
5-6	HQ301	CTP-0008 Rev C	Test Plan Assembly Test Article (ATA)		2	U
5-6	HQ301	CTP-0011	Test Plan for Qualification of the Modified Igniter	Aug 87	2	U
5-6	HQ301	CTP-0013 Rev A	Space Shuttle Development Motor DM-8 Static Test Plan	July 87	2	U
5-6	HQ301	CTP-0014	Test Plan System Tunnel/Vibration Test	Mar 87	2	U
5-6	HQ301	CTP-0015 Rev B	SRM Nozzle Bearing Torque vs Temperature Test Plan	05/06/88	2	U
5-6	HQ301	CTP-0017	Test Plan Fungus Resistance of Aluminum Systems Tunnel Materials	03/31/87	2	U
5-6	HQ301	CTP-0018 Rev A	Pathfinder Test Plan	July 87	2	U
5-6	HQ301	CTP-0019 Rev B	Space Shuttle Development Motor No. 9 (DM-9) Static Fire Test Plan	12/15/87	2	U
5-6	HQ301	CTP-0020	Field Joint Assembly Fixture Installation Test Plan	Apr 87	2	U
5-6	HQ301	CTP-0022	Qualification Test Plan Wind Tunnel Testing of the SRM Field/Factory Joints Including Heater Cables and Connectors	May 87	2	U
5-6	HQ301	CTP-0037 Rev a	Transient Pressure Test Article (TPTA) 2.1 Test Plan	03/09/88	2	U
5-6	HQ301	CTP-0038 Rev C	Space Shuttle Qualification Motor No. 6 (QM-6) Static Fire Test Plan	04/19/88	2	U
5-6	HQ301	CTP-0039 Rev B	Space Shuttle Qualification Motor No. 7 (QM-7) Static Fire Test Plan	06/13/88	2	U
5-6	HQ301	CTP-0040	Transient Pressure Test Article (TPTA) 1.2 Test Plan	02/02/88	2	U
5-6	HQ301	CTP-0041 Rev A	Full-Scale Joint Environment Simulator 1B (JES-1B) Test Plan	Sept 86	2	U
5-6	HQ301	CTP-0042	Moisture Seal Qualification Test	10/15/87	2	U
5-6	HQ301	CTP-0043 Rev A	Qualification Test Plan for the SRM Rail Shipment Cover Lightning Test	12/16/87	2	U
5-6	HQ301	CTP-0044 A	Qualification Test Plan for Use of the PDX 934-01 Boltmaster Bolt Gage	10/04/88	2	U
5-6	HQ	CTP-0045 Rev A	Qualification Plan for Fiber optics Inspection of J-Seal Bond Line Model C77-0486	05/04/88	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-6	HQ301	CTP-0047 Rev B	Qualification Test Plan for the Field Joint Protection System Vent Valve Aging Test	01/13/88	2	U
5-6	HQ	CTP-0048 Rev A	Qualification Plan for the J-Seal Terminus Inspection System Model C77-0485	03/04/88	2	U
5-6	HQ301	CTP-0049	DFI Adhesives Aging Qualification Test Plan	03/10/88	2	U
5-6	HQ301	CTP-0050 Rev A	Qualification Test OPT Overpressure		2	U
5-6	HQ202	CTP-0051 Rev C	Qualification Test Plan for the Cable Coupling Lightning Transient Test	06/08/89	2	U
5-6	HQ301	CTP-0052 Rev A	Qualification Test Plan for the DFI/OFI/OGI EMC/EMI Test		2	U
5-6	HQ301	CTP-0053	Current Return Jumper Assembly Test		2	U
5-6	HQ301	CTP-0055 Rev A	Space Shuttle Process Verification Motor (PVM-1) Static Fire Test Plan		2	U
5-6	HQ301	CTP-0057	Qualification Plan for Ultrasonic Inspection of the SRM Utilizing the I-98 Inspection Team	11/25/87	2	U
5-6	HQ301	CTP-0059 Rev B	Nozzle Joint Environment Simulator Qualification Hydroproof Test Plan, (NJES-H3)	07/13/88	2	U
5-6	HQ301	CTP-0061 Rev B	Transient Pressure Test Article (TPTA) 2.2 Test Plan	04/27/88	2	U
5-6	HQ301	CTP-0063 Rev A	Aging Studies of O-Ring Resiliency		2	U
5-6	HQ301	CTP-0065	Triaxial Accelerometer Assembly Qualification Test Plan	01/26/88	2	U
5-6	HQ301	CTP-0071 Rev C	RSRM Nozzle Actuator Bracket/Lug Fracture Mechanics Qualification Test Plan		2	U
5-6	HQ301	CTP-0072 Rev A	Aluminum Systems Tunnel Ground Strap	05/06/88	2	U
5-6	HQ301	CTP-0073 Rev A	Qualification Test Plan for the Field Joint Moisture Seal Rain Test	05/06/88	2	U
5-6	HQ301	CTP-0076 Rev A	Vent Port Plug Leak Test Fixture Qualification Test Plan	09/11/89	1	U
5-6	HQ301	CTP-0077	Qualification Plan for J-Seal Bond Line Inspection Tool	04/01/88	2	U
5-6	HQ301	CTP-0080	Qualification Plan for X-Ray of SRM Loaded Motors at M-197 X-Ray Facility	05/03/88	2	U
5-6	HQ301	CTP-0083	Transient Pressure Test Article (TPTA) 1.3 Test Plan	06/07/88	2	U
5-6	HQ405	CTP-0093 C	Qualification Test Plan for the 8U75686 Field Joint Assembly Fixture	07/31/89	1	U
5-6	4B102	CTP-0094 Rev B	Revised Profile Measuring Device (PMD) Qualification Test	11/07/88	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-6	4B102	CTP-0094 Rev B	Revised Profile Measuring Device (PMD) Qualification Test	11/07/88	1	U
5-6	HQ601	CTP-0101	Space Shuttle Technical Evaluation Motor #1 (TEM-01) Static Fire Test Plan	08/10/88	1	U
5-6	HQ601	CTP-0101 Rev A	Space Shuttle Technical Evaluation Motor #1 (TEM-01) Static Fire Test Plan	10/12/88	1	U
5-6	4B102	CTP-0116	Test Plan for Qualification of RSRM Igniter Insulation in the M-111/M-52 Facility	10/24/88	1	U
5-6	HQ301	ETP-0014	Test Plan for SRM Flex Bearing Boot Asbestos NBR Material Replacement	03/17/86	2	U
5-6	1.1.1.2	ETP-0029	Test Plan for Rayon Yarn and Fabric Evaluation	01/17/86	2	U
5-6	HQ301	ETP-0045	Test Plan for Evaluation of New Altax and Captax Acceleration in NBR and EPDM SRM Elastomeric Insulation Materials	04/15/86	2	U
5-6	HQ301	ETP-0054 Rev C	Nozzle Plug Temperature Humidity Environment Study	12/11/87	2	U
5-6	HQ301	ETP-0153	Test Plan for Determining the Effect on Sealability of Rolled or Twisted O-Rings	04/03/87	2	U
5-6	HQ301	ETP-0161 Rev B	Input for TPTA Test Plan at MSFC (TPTA Assembly Measurement Requirements)	01/15/88	2	U
5-6	HQ301	ETP-0175 Rev A	Gask-O-Seal Resiliency Testing Procedure	July 88	2	U
5-6	HQ301	ETP-0182 Rev A	Test Plan for Determination of Leak Test Parameters for Inner and S&A Gaskets of Modified Ignition System	01/15/88	2	U
5-6	HQ301	ETP-0191 Rev A	Test Plan, Joint Insulation Dimensional Inspection		2	U
5-6	HQ301	ETP-0200 Rev A	Engineering Test Plan Adhesive Pressure Sealing	07/07/88	2	U
5-6	HQ301	ETP-0201	Characterization of Cure Completeness for Redesigned Solid Rocket Motor Nozzle Adhesives	02/18/88	2	U
5-6	HQ301	ETP-0212	Tests to Determine Elastic-Plastic and Fracture Mechanics Properties of Case Metallic Materials		2	U
5-6	HQ301	ETP-0222	M-606 Grinding Facility Evaluation	09/17/87	2	U
5-6	HQ301	ETP-0224	JES-3 Vertical Assembly with FJAF Manual Measurement Procedure		2	U
5-6	HQ301	ETP-0226	ETM-1A Aft Exit Cone Investigation, Thermal Response of the new 30 Degree Ply Angle Aft Exit Cone During Cure in the M-111 No. 1 Autoclave		2	U
5-6	1.1.2.1.1	ETP-0228 Rev C	Horizontal Assembly Requirements for RSRM Segments with 7U75170 Field Joint Assembly Fixture	10/19/88	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-6	HQ301	ETP-0229	Slag Formation in TP-H1148 Propellant	09/28/87	2	U
5-6	HQ301	ETP-0231	Systems Tunnel Aluminum Floor Plate Pull Test	Sept 87	2	U
5-6	HQ301	ETP-0232	Test Plan Extruded Cork/EA934NA/KL-60-225 EPDM Rubber Bondline Testing	09/20/87	2	U
5-6	HQ301	ETP-0233	Systems Tunnel Aluminum Floor Plate Ground Strap Aging Test	Oct 87	2	U
5-6	HQ301	ETP-0243	Test Procedure for Calibration Factors for PDX 934-01 Bolt Gage for DM-9 Type Nozzle Radial and Axial Bolts	10/07/87	2	U
5-6	HQ301	ETP-0261	Test Plan for Nozzle Concentricity Gage	Nov 87	2	U
5-6	HQ301	ETP-0265	Test Plan for Hydrogen Embrittlement Testing of Loctite 242 Threading Adhesive/Sealant	01/11/87	2	U
5-6	HQ301	ETP-0267	Redundant and Verification Port Plug Design Leak Check Test Plan	01/04/88	2	U
5-6	HQ301	ETP-0268	Test Plan RSRM Case to Insulation Edge Unbond Study	12/24/87	2	U
5-6	HQ301	ETP-027J Rev A	Nozzle Flex Boot Burst Test	01/25/88	2	U
5-6	HQ301	ETP-0274	Test Plan to Evaluate Chemlok 233 for Use in the RSRM Nozzle Flex Bearing	01/29/88	2	U
5-6	HQ301	ETP-0275	Redundant and Verifiable Nozzle Port Plug Design Test Plan	01/15/88	2	U
5-6	HQ301	ETP-0276	Internal Nozzle Joint Seal Resiliency Test Plan	01/12/88	2	U
5-6	HQ301	ETP-0277	Flexible Boot Loads RSRM Outer Boot Ring Structural Test Plan	01/13/88	2	U
5-6	HQ301	ETP-0279	Pathfinder Adhesive Test Plan for Replacement Outer Boot Ring to Cowl Bonding on the SRM Nozzle		2	U
5-6	HQ301	ETP-0281	Polybutene Requalification	Feb 88	2	U
5-6	HQ301	ETP-0283	Test Plan Aging of Edge Separation Repairs	06/10/88	2	U
5-6	HQ301	ETP-0288	Round Robin Sieve Calibration and AP Particle Size Analysis	02/03/88	2	U
5-6	HQ301	ETP-0289	Outer Boot Ring/Cowl Refurbishment Bond Testing	02/05/88	2	U
5-6	HQ301	ETP-0290	Test Plan Edge Debond Epoxy Adhesive Repair Evaluation	04/05/88	2	U
5-6	HQ301	ETP-0291	RSRM: Nozzle Support - Determining the Effect of Multiple Cure Cycles on Space Shuttle RSRM Aft Exit Cone Liner Carbon Cloth Phenolic	02/09/88	2	U
5-6	HQ301	ETP-0292	Test Plan for Determining Air Load Test Safety for Tool 2U129720, 2U298799, and 2U129786	02/15/88	2	U
5-6	HQ301	ETP-0294	Cohesive and Adhesive Fracture Toughness Characterization of ASF/NBR Propellant (TP-H1148 and	02/15/88	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-6	HQ301	ETP-0295 Rev A	Test Plan for Hydrogen Embrittlement Testing of Silane Primer	05/17/88	2	U
5-6	HQ301	ETP-0296	Test Plan for Proof and Burst Test for Pressure Transducer and LVDT		2	U
5-6	HQ301	ETP-0297	Chemical Stability of HD-2 Grease Test Plan	02/03/88	2	U
5-6	HQ301	ETP-0298	DM-9 Postfire Insulation to Case Clevis Edge Unbond Investigation	02/19/88	2	U
5-6	HQ301	ETP-0300	Heater Cable Bracket Bond Evaluation Test Plan		2	U
5-6	HQ301	ETP-0301	Nozzle/Case Joint Adhesive Development Test	02/26/88	2	U
5-6	HQ301	ETP-0303	Effects of Methyl Chloroform and MEK on Chemlok-to-NBR Bond Integrity		2	U
5-6	HQ301	ETP-0305	Delayed Usage SRM Propellant/Liner Bondline Characterization	03/01/88	2	U
5-6	HQ301	ETP-0307	Test Plan Evaluating the Insulation of Stiffener Rings in M-52/M-111 Facility	07/22/88	2	U
5-6	HQ301	ETP-0309	Test Plan to Qualify Moulds used in the Manufacture of RSRM Igniter Nozzle Inserts	05/27/88	2	U
5-6	HQ301	ETP-0310	Aluminum Particle Size Investigation Program Plan	01/26/88	2	U
5-6	HQ301	ETP-0312	Tests to Determine Sealing Capability of the S&A Rotor Shaft O-Rings	03/23/88	2	U
5-6	HQ301	ETP-0313	Improved Vacuum Bag Bleeder Systems for SRM Case Insulation	Apr 88	2	U
5-6	HQ301	ETP-0314	Phase I, RSRM TP-H1178 Igniter Propellant Characterization	04/08/88	2	U
5-6	HQ301	ETP-0315	Evaluation of Particle Size Measuring Techniques	03/15/88	2	U
5-6	HQ301	ETP-0316	Characterization of PR1422 MIL-S-8802, CL B-2/UF3296 (STW5-3215) Backfill in the Aft Exit Cone	04/06/88	2	U
5-6	HQ301	ETP-0317	Test Plan for T-97 Servoactuator Gain Stability Margin Test	03/28/88	2	U
5-6	HQ301	ETP-0320	Phased Testing to Characterize Elastic-Plastic and Fracture Mechanics Properties of Case Metallic Materials	05/03/88	2	U
5-6	HQ301	ETP-0322	Test Plan for Material Characterization of UF3118 Adhesive	04/01/88	2	U
5-6	HQ301	ETP-0323	ETV Cure Study	Apr 88	2	U
5-6	HQ301	ETP-0324	Test Plan to Determine Rupture Pressure of the Hyrotechnic Gasket Cover and Igniter Initiator Environmental Seals	May 8	2	U
5-6	HQ301	ETP-0325	RSRM Nozzle Glass to Carbon Interface Low Density Indication	May 88	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-6	HQ301	ETP-0327	Cowl Vent Hole Slag Studies	06/06/88	2	U
5-6	HQ301	ETP-0328	FJPS Moisture Seal Characterization	05/05/88	2	U
5-6	HQ301	ETP-0329	Test Plan to Determine the Effect of O-Ring Squeeze on Barrier-Booster Rotor Torque	04/28/88	2	U
5-6		ETP-0329 Rev A	Test Plan to Determine the Effect of O-Ring Squeeze on Barrier-Booster Rotor Torque	11/21/88	2	U
5-6	48202	ETP-0330	SRM Glass Cloth Phenolic Tag End Resin Content Versus Component Resin Content	06/09/88	2	U
5-6	HQ301	ETP-0332	SRM Second Source Evaluation of Cork Insulation	05/06/88	2	U
5-6	HQ301	ETP-0333	Effects of Process Variables on EPDM/D6AC Bond Integrity Test Plan	June 88	2	U
5-6	HQ301	ETP-0334 Rev A	Adhesive Tape Residue Test Plan	June 1989	2	U
5-6	HQ301	ETP-0335	Contamination Removal Using Various Solvents and Methodologies Test Plan	May 88	2	U
5-6		ETP-0336	M-52 Blastroom Contamination Test Plan	Aug 88	2	U
5-6	HQ301	ETP-0337 Rev A	RSRM Full Sized Wrapped Glass and Silica Cloth Characterization Test Rings		2	U
5-6	HQ301	ETP-0338 Rev A	EPDM/Chopped Silica Phenolic Bonding Test Plan	06/10/88	2	U
5-6		ETP-0340	TP-H1148 Knitline Integrity Evaluation	05/17/88	2	U
5-6	HQ301	ETP-0345	RSRM External Insulation Characterization	06/24/88	2	U
5-6		ETP-0356	Effect of Finish on Bond Strength Test Plan	06/14/88	2	U
5-6	HQ301	ETP-0358	Nozzle/Case Joint Adhesive Development Test Phase II	06/20/88	2	U
5-6	48102	ETP-0359	Test Plan Space Shuttle SRM Electrostatic Sensitivity and Charge Generation Studies	Sept 88	2	U
5-6		ETP-0361	RSRM Nozzle Throat Support Housing Repair Development Testing	09/02/88	2	U
5-6	HQ301	ETP-0362 Rev A	RSRM TP-H1148 Propellant Long-Term Strain Capability Characterization	12/01/88	2	U
5-6	48102	ETP-0366	RSRM FWD Exit Cone S/N 16 Glass to Carbon Interface Low Density Indication Testing	Oct 88	2	U
5-6	48102	ETP-0367	Test Plan Bondline Pressure at the Clevis Insulation Interface	08/02/88	2	U
5-6	48102	ETP-0367 Rev A	Bondline Pressure at the Clevis Insulation Interface	11/11/88	2	U
5-6	HQ301	ETP-0369	Test Plan for SRM Nozzle Char Line Measurement	07/13/88	2	U
5-6		ETP-0372	Evaluation of West Wipes, Anticon 100, S/N 57-856060	08/08/88	2	U



PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-6		ETP-0374	Test Plan for the Hydroburst of an Igniter Assembly	06/30/88	2	U
5-6		ETP-0375	RSRM TP-H1148 Ignition Propellant Strain Characterization	07/21/88	2	U
5-6	4B102	ETP-0392	RSRM Aft Exit Cone S/N 13 Glass Cloth Low Density Indication Testing	Oct 88	2	U
5-6		ETP-0393 Rev A	RSRM Center Segment Propellant Grain Dimension Measurement	12/22/88	2	U
5-6	4B102	ETP-0395	Cork to Case Bonding Test Plan	08/08/88	2	U
5-6	HQ302	ETP-0396	Evaluation of Gloves Recommended for Solvent Cleaning with Methyl Chloroform	Sept 88	2	U
5-6	HQ301	ETP-0398	Engineering Test Plan Epoxy Adhesive Screening	08/17/88	2	U
5-6	B1231	ETP-0399	Test Plan Chemlok Adhesive Bonding System Temperature and Time Characterization	08/25/88	2	U
5-6		ETP-0402	Polysulfide Adhesive: Material and Bonding Capabilities at Small Load Rates	Aug 88	2	U
5-6	HQ301	ETP-0417	RSRM Field Joint Volume No. 4 (V4) Pressurization Tests	Oct 88	2	U
5-6	4B102	ETP-0421	Aft Exit Cone S/N 14 LDI's	12/02/88	2	U
5-6	4B102	ETP-0422	STS-26 Postflight Systems Tunnel Aluminum Floor Plate Pull Test	10/28/88	2	U
5-6	4B102	ETP-0422 Rev A	STS-26 Postflight Systems Tunnel Aluminum Floor Plate Pull Test	11/11/88	2	U
5-6	4B102	ETP-0431	Test Plan for Igniter Heater EMI Transient Test	11/17/88	2	U
5-6	HQ301	ETP-0436	HPM Forward Segment Inspection Following Long Term Vertical Storage Prior to Rail Shipment Back to Utah	11/28/88	2	U
5-6		ETP-0441	Fracture Mechanics Testing of the RSRM Stiffener Stub Detail	Dec 88	2	U
5-6	1.4.2.3.8	PO-915008	Morton Thiokol Purchase Order to Bell and Howell CEC Division, POT Test Requirements		2	U
5-6	1.4.2.3.7	TWR-10618	Test Plan for SRM Inhibitor/Slot Cold Flow Testing	08/12/76	2	U
5-6	1.4.2.3.5	TWR-10648 Rev A	Test Plan for Structural Verification Testing, SRM Prototype Bearing Characterization (Approved)	06/28/76	1	U
5-6	1.4.2.3.5	TWR-10649 Rev B	Test Plan for Vectoring Endurance Testing SRM Prototype Bearing Characterization (Approved)	09/08/76	1	U
5-6	1.4.2.3.5	TWR-10650	Test Plan for Tensile Limit Testing SRM Prototype Bearing Characterization (Approved)	09/24/76	1	U
5-6	1.4.2.3.7	TWR-10651 Rev A	SRM Liner Requalification Plan	02/20/76	2	U
5-6	1.4.2.3.5	TWR-10686	Test Plan, SRM Nozzle Exit Cone Cutoff System, Preliminary Sizing	10/06/75	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-6	1.4.2.3.6	TWR-10697	Test Plan for Fabrication Verification Program SRM Igniter Throat Insert	10/14/77	2	U
5-6	1.4.2.3	TWR-10699	SRM Forgings Sectioning Plan (Approved)		1	U
5-6	1.4.2.3.3	TWR-10700	Test Plan for Aft Case Segment Forging Evaluation SRM Case (Approved)	05/24/76	1	U
5-6	1.4.2.3.3	TWR-10702	Test Plan for Attach Case Segment Forging Evaluation SRM Case Program (Approved)	08/04/76	1	U
5-6	1.4.2.3.3	TWR-10704	Test Plan for Forward Case Segment Forging Evaluation SRM Case Program (Approved)	08/04/76	1	U
5-6	1.4.2.3.5	TWR-10706	Test Plan for Exit Cone Housing Forging Evaluation, SRM Nozzle Program (Approved)	06/15/76	1	U
5-6	1.4.3.3.5	TWR-10708 Rev A	SRM Nozzle System Test Plan for Aft End Ring Evaluation, SRM Bearing (Approved)	03/17/76	1	U
5-6	1.4.2.3.5	TWR-10710 Rev A	Test Plan for Nose Inlet Housing Forging Evaluation SRM Nozzle (Approved)	02/14/77	1	U
5-6	1.4.2.3.5	TWR-10712 Rev A	Test Plan for Forward End Ring Evaluation, SRM Bearing (Approved)	01/21/76	1	U
5-6	1.4.2.3.5	TWR-10714	Test Plan for Cowl Housing Forging Evaluation SRM Nozzle (Approved)	01/21/76	1	U
5-6	1.4.2.3.5	TWR-10716	Test Plan for Throat Support Housing Forging Evaluation, SRM Nozzle Program (Approved)	04/07/76	1	U
5-6	1.4.2.3.5	TWR-10718	Test Plan for Fixed Housing Forging Evaluation, SRM Nozzle (Approved)	06/07/76	1	U
5-6	1.4.2.3.5	TWR-10718	Test Plan for Fixed Housing Forging Evaluation, SRM Nozzle (Approved)	06/07/76	1	U
5-6	1.4.2.3.4	TWR-10720 Rev C Amend 1	Test Plan for Compliance Ring Forging Evaluation, SRM Nozzle (Approved)	05/31/78	1	U
5-6	1.4.2.3.5	TWR-10722 Rev A	Test Plan for Nozzle Actuator Bracket Forging Evaluation SRM, Nozzle Program (Approved)	07/27/78	1	U
5-6	1.4.2.3.5	TWR-10724	Test Plan for Exit Cone Adapter Forging Evaluation, SRM Nozzle Program (Approved)	04/07/76	1	U
5-6	1.4.2.3.5	TWR-10726	Test Plan for Shim Forging Evaluation, SRM Bearing (Approved)	03/17/76	1	U
5-6	1.4.2.3.6	TWR-10732	SRM Ignition System Test Plan for Evaluation of the Forging for the SRM Ignition Initiator Chamber (Approved)	02/20/76	1	U
5-6	1.4.2.3.6	TWR-10734	Ignition System Test Plan for the Forging for the SRM Igniter Adapter (Approved)	01/13/76	1	U
5-6	1.4.2.3.6	TWR-10736	SRM Ignition System Test Plan for Evaluation of the Forging for the SRM Igniter Chamber (Approved)	03/03/76	1	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-6	1.4.2.3.6	TWR-10787 Rev B	SRM Ignition System Test Plan Igniter Initiator Static Firing (Approved)	02/12/76	1	U
5-6	1.4.2.3.6	TWR-10790 Rev B	SRM Ignition System Test Plan Booster-Barrier Static Firing (Approved)	01/12/76	1	U
5-6	1.4.2.3.7	TWR-10807 Addend 2	Static Test Requirements for Insulation Test Motor TU-768 Modified	02/25/76	2	U
5-6	1.4.2.3.8	TWR-10811 Rev A	Instrumentation Evaluation Test Plan for SRM STA-1	09/09/76	2	U
5-6	1.4.2.3.6	TWR-10818 Rev C	SRM Ignition System Test Plan Ignition System Development and Qualification (Approved)	12/18/76	1	U
5-6	1.4.2.3.7	TWR-10834	Test Plan for Castable Inhibitor	06/15/76	2	U
5-6	1.4.2.3.4	TWR-10847	Test Plan, SRM Propellant TP-H1148	03/15/76	2	U
5-6	1.4.2.3.5	TWR-10866	Bonding Test Plan, Instruments for SRM Instrumentation	04/21/76	2	U
5-6	1.4.2.3.6	TWR-10978 Rev A	SRM Safety and Arming Device Test Plan for Barrier-Booster Lot Acceptance Testing	Sept 80	2	U
5-6	1.4.2.3.3	TWR-10983	Test Plan for SRM Case Heat Treat Qualification Program, Phase 1A and 1B, Phase II, Phase III	04/22/76	2	U
5-6	1.4.2.3.8	TWR-11015	Test Plan for Operational Pressure Transducer Leak Test SRM Instrumentation	06/02/76	2	U
5-6	1.4.2.3.4	TWR-11020	Acoustic Emission for Strand Burning Test Plan	Sept 76	2	U
5-6	1.4.2.3.5	TWR-11021 Rev D Amend 1	Test Plan for Acceptance Testing SRM DM-1 and DM-2 Flex Bearings (Approved)	11/08/77	1	U
5-6	1.4.2.3.3	TWR-11036	Test Plan for Evaluation of Pin Retainer and Joint Seal (Approved)	11/22/76	1	U
5-6	1.4.2.3.6	TWR-11037 Rev F	SRM S&A Device Test Plan, Pre-Qualification Tests (Approved)	Apr 77	1	U
5-6	1.4.2.3.6	TWR-11039 Rev C	Test Plan S&A Shipping and Storage Container Testing	08/27/80	2	U
5-6	1.4.2.3.4	TWR-11041	Test Plan for Combustion Stability Study, SRM Propellant, TP-H1148 (Approved)	05/14/76	1	U
5-6	1.4.2.3.10	TWR-11042 Rev B Amend 1	Test Plan for Space Shuttle Development Motor 1 Static Test (Approved)	04/25/77	1	U
5-6	1.4.2.3.4	TWR-11044 Rev A	Test Plan for TP-H1148 Propellant Mechanical Properties Determination	Jan 77	2	U
5-6	1.4.2.3.10	TWR-11045	Test Plan for SRB Nozzle/TVC Confirmation Test (Approved)	12/07/76	1	U
5-6	1.4.2.3.4	TWR-11098 Rev A	Test Plan for Propellant Temperature Sensitivity and Burning Rate Slope Characterization	02/24/77	2	U
5-6	1.4.2.3.4	TWR-11098 Rev A	Test Plan for Propellant Temperature Sensitivity and	02/24/77	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-6	1.4.2.3.6	TWR-11103	Safety and Arming Device Test Plan Qualification Tests (Approved)	May 78	1	U
5-6	1.4.2.3.6	TWR-11103	Safety and Arming Device Test Plan Qualification Tests (Approved)	May 78	1	U
5-6	1.4.2.3.3	TWR-11153 Rev C	Test Plan SRM Case Hydroburst (Approved)	09/26/77	1	U
5-6	1.4.2.3.4	TWR-11153 Rev C	Test Plan SRM Case Hydroburst (Approved)	09/26/77	1	U
5-6	1.4.2.3.6	TWR-11190	Test Plan for Hydroproof Test, Simulated Igniter Adapter (Tool), P/N 2U65020	09/15/76	2	U
5-6	1.4.2.3.6	TWR-11190	Test Plan for Hydroproof Test, Simulated Igniter Adapter (Tool), P/N 2U65020	09/15/76	2	U
5-6	1.4.2.3	TWR-11191	Test Plan, Sensor Installation Qualification Program	02/06/78	2	U
5-6	1.4.2.3.10	TWR-11207 Rev B	Test Plan for Testing SRM Nozzle Protective Plug, 1U51213	11/11/77	2	U
5-6	1.4.2.3.5	TWR-11255 Rev A	Test Plan for Nozzle Snubber Segment Forging Evaluation SRM Nozzle Program (Approved)	07/18/78	1	U
5-6	1.4.2.3.5	TWR-11257	Test Plan for Snubber Support Ring Forging Evaluation SRM Nozzle Program (Approved)	04/18/78	1	U
5-6	1.4.2.3.5	TWR-11285 Rev A	Test Plan for Aft Exit Cone Shell Evaluation, SRM Nozzle Program (Approved)	06/01/78	1	U
5-6	1.4.2.3.4	TWR-11293	Qualification Plan for Replacement of PBNA in HB and HC Polymers	06/27/77	2	U
5-6	1.4.2.3.6	TWR-11338 Rev H Addend A	Test Plan, Ignition System Lot Acceptance Test	Feb 82	2	U
5-6	1.4.2.3.6	TWR-11345	Ignition System Development Test with TP-H1178 Propellant	May 77	1	U
5-6	1.4.2.3.6	TWR-11349 Rev A	Space Shuttle SRM Ignition System Test Plan Ignition System Qualification (Approved)	01/12/79	1	U
5-6	1.4.2.3.10	TWR-11425 Rev A Addend 1, 4, 5	Space Shuttle SRM Development Motor No. 2 Static Test Plan (Approved)	12/20/77	1	U
5-6	1.4.2.3.5	TWR-11511	Test Plan SRM Nozzle Fixed Housing Hydrotest	08/22/77	2	U
5-6	1.4.2.3.10	TWR-11556 Rev B Amend 1, 2, 3	Test Plan for Space Shuttle Development Motor No. 3 Static Test (Approved)	08/30/78	1	U
5-6	1.4.2.3.10	TWR-11587 Rev A	Test Plan for Space Shuttle SRM Actuator Verification Plan (Approved)	03/08/78	1	U
5-6	1.4.2.3	TWR-11707	Test Plan for Residual Stress Measurements	01/23/78	2	U
5-6	1.4.2.3.4	TWR-11712	Test Plan, SRM Rail Transportation and Rail Coupling Test (Approved)	06/06/78	2	U
5-6	1.4.2.3.10	TWR-11752 Rev A Amend 1	Test Plan for Space Shuttle Development Motor No. 4 Static Test (Approved)	11/25/78	1	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-6	1.4.2.3.10	TWR-11825 Rev A	QM Static Firing Test Plan (Approved)	05/14/79	1	U
5-6	1.4.2.3.10	TWR-11826 Rev A Amend 2	Test Plan for Space Shuttle Qualification Motor No. 2	08/31/79	1	U
5-6	1.4.2.3.10	TWR-11827 Amend 5	Test Plan for Space Shuttle Qualification Motor No. 3	08/15/80	1	U
5-6	1.4.2.3.3	TWR-11892 Amend 1	Test Plan for Systems Tunnel Cover Pull Test	09/26/78	2	U
5-6	1.4.2.3.6	TWR-11940	Space Shuttle SRM Safety and Arming Device, Test Plan for Barrier-Booster Lot Acceptance Testing	07/27/78	2	U
5-6	1.4.2.3.3	TWR-12131	Test Plan for Tensile Testing of SRM O-Ring Splice Joints	01/16/79	2	U
5-6	1.4.2.3.6	TWR-12323	Delta Qualification Plan, Space Shuttle SRM Ignition System Qualification Flight-Weight Cylinder Segment Hydroburst	06/22/79	1	U
5-6	1.4.2.3.8	TWR-12545	Test Plan for Simulated Servoaccelerometer Installation Qualification Test Segments and Propellant and Bondline Properties	12/04/79	2	U
5-6	1.4.2.3.3	TWR-12676 Rev B	Test Plan for Utilization of SRM Forward Segment for Structural Analysis Validation (STS-2A and B)	Aug 80	2	U
5-6	1.4.2.3	TWR-12689	Test Plan for Space Shuttle Inert Forward Segment Inspection and Monitoring (GTM-4 and 5)	04/10/80	2	U
5-6	1.4.2.3.3	TWR-12690	Test Plan for Space Shuttle SRM Lightweight Cylinder Segment Joint Verification	06/18/80	1	U
5-6	1.4.2.3.3	TWR-12761 Rev A	Bonding Test Plan, Systems Tunnel Adhesives	07/16/81	2	U
5-6	1.4.2.3.6	TWR-12775	Test Plan for Full-Scale Final Evaluation (Delta Qual) of the NSI Redundant Seal and Lot Acceptance Test of Lot ABB	Nov 80	2	U
5-6	1.4.2.3.6	TWR-12827	Space Shuttle SRM Ignition System Test Plan Igniter Initiator Static Firing	01/08/81	2	U
5-6	1.4.2.3.6	TWR-12828 Rev A	Test Plan, Ignition System Lift Demonstration	07/09/81	2	U
5-6	1.4.2.3.10	TWR-12839 Amend 1	Test Plan for Space Shuttle Qualification Motor No. 4 Static Test	02/25/83	1	U
5-6	1.4.2.3	TWR-12874	Test Plan for Compatibility of Lubricants with SRM Propellant, Insulation, and Inhibitor	Nov 80	2	U
5-6	1.4.2.3.6	TWR-12882	Test Requirements for the Special NASA Directed Firing of Known Leakers and Known Non-Leaking Barrier-Boosters	Dec 80	2	U
5-6	1.4.2.3.10	TWR-12960 Amend 2	Test Plan for Space Shuttle Development Motor No. 5	07/02/82	1	U
5-6	1.4.2.3.5	TWR-13110	Failure Investigation Plan, Propagation Failure of Space Shuttle SRM Nozzle Flight	08/04/81	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-6	1.4.2.3.6	TWR-13219	Space Shuttle SRM Safety and Arming Device Test Plan for Full-Scale Final Evaluation (Delta Qualification 1U52294-01) of the Initiator Redundant Seal and Lot Acceptance of Lot AAA 1U510703-01	Oct 82	2	U
5-6	1.4.2.3.4	TWR-13283 Rev A	Test Plan for Evaluation of Fracture Properties of SRM Handling Ring Materials	04/20/82	2	U
5-6	1.4.2.3.6	TWR-13385	Test Plan Qualification of SRM S&A Armature Manufactured by Electro-Motion Inc.	May 82	2	U
5-6	FN301	TWR-13427	Test Plan for Space Shuttle FWC-SRM Development Motor No. 6 Static Test	10/04/84	2	U
5-6	FN301	TWR-13743 Rev B	FWC-SRM Mass Properties Program Plan	01/18/85	2	U
5-6	1.1.1.3	TWR-13866	Test Plan Qualification of Barrier-Booster Housing Manufactured by Precise Machine Co.	06/15/83	2	U
5-6	1.1.1.2.3	TWR-14069	Space Shuttle SRM Safety and Arming Device Test Plan for Ignition Granule Aging	11/14/83	2	U
5-6	FN301	TWR-14077	Test Requirements for FWC-SRM Systems Tunnel Water Impact Effect on Cable and Cable Clamping	11/16/83	2	U
5-6	FN301	TWR-14087	Test Plan, Dynamics Load Analysis of the FWC-SRM System Tunnel Linear Shape Charge		2	U
5-6	FN301	TWR-14105 Rev A	FWC-SRM Subscale Systems Tunnel Verification Vibration Test	08/08/84	2	U
5-6	1.1.1.2.3	TWR-14205	Test Plan Qualification of SRM Igniter and Initiator Insulated in the X-20 Facility	04/17/84	2	U
5-6	1.1.1.2.3	TWR-14359 Rev A	Program Plan, Protection of Space Shuttle SRM Primary Motor Seals	08/30/85	2	U
5-6	1.1.1.2	TWR-14459	Inspection Plan for Recovered Hardware		2	U
5-6	FN301	TWR-14489 Rev A	Test Plan for Space Shuttle FWC-SRM Development Motor No. 7 Static Test	Mar 85	2	U
5-6	FN301	TWR-14559	Dynamic Model Verification of the Space Shuttle DM-3 Solid Rocket Motor in the Static Firing Test Stand	08/20/84	2	U
5-6	FN301	TWR-14702	Space Shuttle SRM Forward Center Segment Inhibitor Model Survey Test Plan	11/13/84	2	U
5-6	FN301	TWR-14713 Rev A	Test Plan for Space Shuttle FWC-SRM Development Motor No. 7 Post Fire Deflection Test	Apr 85	2	U
5-6	FN301	TWR-14784	Evaluation Plan to Determine Bullet-Proofing Capabilities of Materials Proposed for Use on Balsa Railcar Covers for Shipping FWC	01/25/85	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-6	FN301	TWR-14835	Evaluation Plan to Determine Possibility of PWC-SRM Ignition Caused by End Grain Shots During Shipping	06/21/85	2	U
5-6	FN301	TWR-14860	Test Plan for Space Shuttle FWC-SRM	June 85	2	U
5-6	FN301	TWR-14860	Qualification Motor No. 5 Static Test	Aug 85	2	U
5-6	1.1.1.2	TWR-14908	Nozzle Severance LSC Lot Acceptance Plan	Mar 86	2	U
5-6	1.1.1.2	TWR-14908	Nozzle Severance LSC Lot Acceptance Plan	Mar 86	2	U
5-6	1.1.1.2	TWR-14925 Rev C	Space Shuttle SRM Safety and Arming Device Lot Certification Plan	Jan 86	2	U
5-6	1.1.1.2	TWR-14925 Rev C	Space Shuttle SRM Safety and Arming Device Lot Certification Plan	Jan 86	2	U
5-6	FN301	TWR-14960	Test Plan for FWC-SRM Subscale Systems Tunnel LSC Initiator Vibration Test	04/24/85	2	U
5-6	FN301	TWR-14960	Test Plan for FWC-SRM Subscale Systems Tunnel LSC Initiator Vibration Test	04/24/85	2	U
5-6		TWR-15172	SRM Nozzle Component Process Evaluation Plan	02/26/86	2	U
5-6	1.1.1.2	TWR-15194	Work Statement to Southern Research Institute (SoRI) for Baseline Testing of Carbon Phenolic Materials in a US Polymeric Aft Inlet (-404) Ring	03/19/86	2	U
5-6	1.1.1.2	TWR-15197	Work Statement to Southern Research Institute (SoRI) for Comparative Testing of Carbon Phenolic Materials	03/19/86	2	U
5-6	1.1.1.2	TWR-15219 Rev B	Space Shuttle SRM 1U51703 Pyrotechnic Basket Assembly Lot Certification Plan	Apr 86	2	U
5-6	1.1.1.2	TWR-15271	Carbon Fabric Process Audit Plan	10/30/85	2	U
5-6	1.1.1.2	TWR-15311	Rayon Yarn Process Audit Plan	11/25/85	2	U
5-6	1.1.1.2	TWR-15312	Rayon Fabric Process Audit Plan	01/14/86	2	U
5-6	1.1.1.2	TWR-15313	Carbon/Graphite Cloth Phenolic Process Plan	04/10/84	2	U
5-6	HQ301	TWR-15335 Rev A	Test Plan for Static Test of O-Ring Validation Motors	03/01/86	2	U
5-6	1.1.1.2	TWR-15435	Work Statement to Southern Research Institute (SoRI) for Evaluation of Procession Variables on Carbon Phenolic Materials	03/12/86	2	U
5-6	1.1.1.2	TWR-15436	Work Statement to Southern Research Institute (SoRI) for Testing of Carbon Cloth Phenolic Material in a Fiberite Aft Inlet (-404) Ring	03/11/86	2	U
5-6	HQ301	TWR-15537 Amend 1	Program Joint Environment Simulator Plan	08/04/86	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-6	HQ301	TWR-15657	Statement of Work Required to Development a Space Shuttle Solid Rocket Motor Model Capable of Representing the Global Three-Dimensional Joint Response	04/11/88	2	U
5-6		TWR-15658	Solid Rocket Motor (SRM) Center Segment Model Survey No. 2	Oct 86	2	U
5-6	HQ301	TWR-15738 Rev C	Program Plan for Joint Protection System	04/03/87	2	U
5-6		TWR-15751 Rev D	Statement of Work, O-Ring Resiliency/Recovery Tests	04/20/87	2	U
5-6	HQ301	TWR-15913 Rev B	Statement of Work, Seal Studies by Atomic Energy of Canada Limited	10/23/87	2	U
5-6	HQ301	TWR-16010	RSRM NDE Plan Insulated Case, Loaded Motor Nozzle	03/31/87	2	U
5-6	HQ301	TWR-16119	Engineering Plan for the Development of RSRM Seal Leak Test Procedures	03/24/87	2	U
5-6	HQ301	TWR-16144	Quality Engineering Plan for Vendor Reassessment	Jan 87	2	U
5-6	1.1.1.2	TWR-16314	Test Plan for Phenolic Resin and Carbon Filler	11/20/85	2	U
5-6	HQ301	TWR-16343 Rev A	Structural Test Article (STA-3) Engineering Test Requirements	Oct 87	2	U
5-6		TWR-16374	Precision Cleaning of SRM Critical Bond Surfaces with Cryogenic Blasting	Aug 88	2	U
5-6		TWR-16396	Program Plan Technical Evaluation Motor Baseline	09/09/88	2	U
5-6	HQ301	TWR-16509	National Technical Systems O-Ring Resiliency/Recovery Tests	03/27/87	2	U
5-6	HQ301	TWR-16509	JAD2 Leak Test Procedure	04/09/87	2	U
5-6	HQ301	TWR-16612	NJAD Leak Test Procedure	05/01/87	2	U
5-6	HQ301	TWR-16769 Rev B	Program Plan for Systems Tunnel (Foam Core) Redesign	11/02/88	2	U
5-6	HQ301	TWR-16819 Rev B	Aft Skirt Operations	11/16/88	2	U
5-6		TWR-16819 Rev A	Aft Skirt Operations	08/01/88	2	U
5-6	HQ301	TWR-16899	Postfire Data Review Cycle	09/29/87	2	U
5-6	HQ301	TWR-16929	SRM Nozzle Adhesive Verification Program Plan	12/14/87	2	U
5-6		TWR-16941 Rev A	Structural Model Verification Plan for the RSRM	08/30/88	2	U
5-6	N/A	TWR-17198 Rev B Vol 9	Postfire Engineering Evaluation Limits Instrumentation Component	01 30 89	2	U
5-6		TWR-17198 Rev A	Postfire Engineering Evaluation Limits, Case Component, Volumes II and VIII	04/18/88	2	U
5-6		TWR-17198 Rev A Vol 1	Postfire Engineering Evaluation Limits System Overview	10/31/88	2	U
5-6		TWR-17198 Rev A Vol 4	Postfire Engineering Evaluation Limits Seals Component	04/18/88	2	U



PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-6	N/A	TWR-17198 Rev B Vol 5	Postfire Engineering Evaluation Limits Nozzle Component	02 27 89	2	U
5-6		TWR-17198 Rev A Vol 6	Postfire Engineering Evaluation Limits Igniter Component	11/22/88	2	U
5-6		TWR-17198 Rev A Vol 7	KSC Postfire Engineering Evaluation Limits Joint Protection System (JPS) Component	04/18/88	2	U
5-6		TWR-17198 Rev A Vol 7	Postfire Engineering Evaluation Limits, Joint Protection System (JPS) Component	01/18/88	2	U
5-6		TWR-17198 Rev B Vol 2	Postfire Engineering Evaluation Limits, Case Component	10/31/88	2	U
5-6		TWR-17198 Rev B Vol 8	Postfire Engineering Evaluation Limits, System Tunnel Component	10/31/88	2	U
5-6		TWR-17198 Rev B Vol 8	KSC Postfire Engineering Evaluation Limits Tunnel Component	10/31/88	2	U
5-6	HQ301	TWR-17198 Vol 1	Postfire Engineering Evaluation Limits System Overview	03/03/88	2	U
5-6	HQ301	TWR-17404 Rev B	Space Shuttle SRM Actuator Length Determination for PV-1		2	U
5-6	HQ301	TWR-17769 Rev A	Program Plan for Systems Tunnel (Foam Cure) Redesign	10/13/88	2	U
5-6	HQ301	TWR-17807	Qualification Plan for X-Ray of SRM Loaded Motors at M-197 X-Ray Facility	12/12/87	2	U
5-6	HQ301	TWR-17843	Leak Test Procedure for Flawed Seals	12/16/87	2	U
5-6	HQ301	TWR-17915	Test Plan for 5/8" Autoclave Hose Evaluation		2	U
5-6	HQ301	TWR-17929	Statement of Work Required for Hydrogen Embrittlement Testing of D6AC Steel Coated with Loctite 242 Adhesive/Locking Fluid	01/11/87	2	U
5-6	HQ301	TWR-18052 Rev A	Length Determination for QM-7	04/28/88	2	U
5-6	HQ301	TWR-18095	RSRM Thrust Offset Determination for T-97	02/25/88	2	U
5-6	HQ301	TWR-18373	Statement of Work FE Analysis of the Igniter Special Bolt or Missing Bolt Condition	05/03/88	2	U
5-6		TWR-18383	Space Shuttle RSRM Leak Test Systems Certification/Acceptance Requirements	07/29/88	2	U
5-6		TWR-18385	Lightning Sensor Calibration and Acceptance Criteria	05/05/88	2	U
5-6	HQ301	TWR-18400	Space Shuttle RSRM Actuator Length Determination for QM-9	09/21/88	2	U
5-6	HQ301	TWR-18436	Statement of Work Fracture Analysis on RSRM Components	05/23/88	2	U
5-6	HQ301	TWR-18457	Leak Test Procedure for PV-1 Flawed Field Joint	May 88	2	U
5-6	HQ301	TWR-18472	QM-6 Postfire Ultrasonic Inspections	06/02/88	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-6		TWR-18568	8U75902 RSRM Leak Test System Certification/Acceptance Requirements	07/29/88	2	U
5-6		TWR-18569	2U29714 Assembly RSRM Joint Leak Check System Certification/Acceptance Requirements	07/29/88	2	U
5-6		TWR-18680 Vol IV Rev D	KSC Postfire Engineering Evaluation Limits, Seals Component	04/19/89	2	U
5-6		TWR-18680 Rev C Vol 7	KSC Postfire Engineering Evaluation Limits, Systems Tunnel Component	02 27 89	2	U
5-6		TWR-18680 Rev B Vol 2	KSC Postfire Engineering Evaluation Limits Case Component	11/18/88	2	U
5-6		TWR-18680 Rev C Vol 3	KSC Postfire Engineering Evaluation Limits Insulation Component	02 15 89	2	U
5-6		TWR-18680 Rev B Vol 4	KSC Postfire Engineering Evaluation Limits Seals Component	11/18/88	2	U
5-6		TWR-18680 Rev C Vol 6	KSC Postfire Engineering Evaluation Limits Igniter Component	02 27 89	2	U
5-6		TWR-18680 Rev D Vol 7	KSC Postfire Engineering Evaluation Limits Joint Protection System (JPS) Component	04/17/89	2	U
5-6		TWR-18680 Rev D Vol 9	KSC Postfire Engineering Evaluation Limits Instrumentation Component	04/12/89	2	U
5-6	HQ601	TWR-18922	Statement of Work Remove Putty from TEM-3 and Subsequent Igniters	11/22/88	2	U
5-6	FN301	WTP-0002	Space Shuttle FWC-SRM Qualification Motor No. 5 Postfire Deflection Test	Aug 85	2	U
5-6	FN301	WTP-0005	Test Plan for Machined-Off Instrumentation Fairing on QM-5 Static Fire Test		2	U
5-6	HQ301	WTP-0011 Rev A	Full-Scale Nozzle Environment Simulator	Apr 87	2	U
5-6	HQ301	WTP-0015 Rev A	SRM Joint Redesign Referee Test Part 1	07/09/86	2	U
5-6	HQ301	WTP-0021	Test Plan for Aging Studies of RSRM, Space Shuttle Nozzle	May 87	2	U
5-6	HQ301	WTP-0023 Rev A	Full-Scale Joint Environment Simulator 1 (JES-1) Test Plan	08/19/86	2	U
5-6	HQ301	WTP-0024 Rev E	Space Shuttle Engineering Test Motor No. 1 Static Test Plan	May 87	2	U
5-6	HQ301	WTP-0028 Rev B	Test Plan for Static Test of Nozzle and Field Joint Circumferential Flow Evaluation Motors	Mar 87	2	U
5-6	HQ301	WTP-0036	Full-Scale Joint Environment Simulator 11A (JES 11A) Test Plan		2	U
5-6	HQ301	WTP-0038 Rev A	70-lb Subscale Motor, Full-Scale Thickness Capture Feature, SRM Joint Test Plan	08/19/86	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-6	HQ301	WTP-0045	Test Plan to Determine Heat Barrier Material Effectiveness in a Jet Impingement Environment	Mar 87	2	U
5-6	HQ301	WTP-0049 Rev A	Nozzle Joint Environment Simulator (NJES) Hydroproof Test Plan H-2A	Jan 87	2	U
5-6	HQ301	WTP-0058 Rev B	Test Plan Joint Environment Simulator 3A (JES-3A)	07/28/87	2	U
5-6	HQ301	WTP-0064 Rev C	Test Plan, Full-Scale Joint Simulator 2B (JES-2B)	02/12/87	2	U
5-6	HQ301	WTP-0066 Rev C	SRM Nozzle Boot Loads Test Plan	01/15/88	2	U
5-6	HQ301	WTP-0067	Test Plan RSRM Case Field Joint Assembly Demonstration (JAD-2)	Apr 87	2	U
5-6		WTP-0068	Space Shuttle SRM Engineering Test Plan for Evaluation of Chrome Plated 1U52291, Barrier-Boosters	10/08/86	2	U
5-6	HQ301	WTP-0069	Test Plan RSRM Nozzle to Case Joint Assembly Demonstration (NJAD)	Feb 87	2	U
5-6	HQ301	WTP-0073	HPM Nose Inlet Housing Structural Test, Test Plan	Aug 87	2	U
5-6	HQ301	WTP-0074 Rev A	STA-3 Instrumentation Installation Test Plan	Aug 87	2	U
5-6	HQ301	WTP-0076 Rev B	Test Plan SRM Field Joint Protection System Kevlar Strap	Oct 87	2	U
5-6	HQ301	WTP-0077	Nozzle Joint Environment Simulator (NJES) Hydroproof Test Plan H-2B	Feb 87	2	U
5-6	HQ301	WTP-0080	Test Plan Field Joint Heater Test 11 Weather Seal Shuttle/Vacuum Test	05/11/87	2	U
5-6	HQ301	WTP-0082 Rev A	Full-Scale Nozzle Environment Simulator (NJES Hot Firing) Test Plan No. 2A	Aug 87	2	U
5-6	HQ301	WTP-0083 Rev A	Full-Scale Nozzle Environment Simulator (NJES Hot Firing) Test Plan No. 2B	Sept 87	2	U
5-6	HQ301	WTP-0084 Rev A	Full Scale Nozzle Environment Simulator (NJES - Hot Firing)	01/19/88	2	U
5-6	HQ301	WTP-0085 Rev A	Full Scale Nozzle Joint Environment Simulator Test Plan	04/11/88	2	U
5-6	HQ301	WTP-0091 Rev A	Determination of Acceptable O-Ring Leak Rate for RSRM Joints using SPC Motors	02/29/88	2	U
5-6	HQ301	WTP-0093	Test Plan for Joint Environment Simulator 3B (JES-3B)	10/01/87	2	U
5-6	HQ301	WTP-0094 C	Test Plan Thermostructural Analysis Verification of the SRM Nozzle, Laboratory Bench Tests	05/15/89	2	U
5-6	HQ403	WTP-0097 Rev B	Thermostructural Analysis Verification (TAV) of the SRM Nozzle, Phase III Forty Pound Charge (FPC) Motor Tests	07/19/89	2	U
5-6	HQ403	WTP-0097 Rev A	Thermostructural Analysis Verification (TAV) of the SRM Nozzle, Phase III Forty Pound Charge (FPC) Motor Tests	11/09/88	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-6	HQ301	WTP-0099	RSRM Joint J-Seal Cold Gas Pressurization Subscale Test Plan	May 87	2	U
5-6	HQ301	WTP-0102 Rev A	Test Plan Instrumentation Evaluation Program Space Shuttle SRM	Nov 87	2	U
5-6	HQ301	WTP-0103	Verification of the SRM Factory Joint Pressure Seal	July 87	2	U
5-6	HQ301	WTP-0106 Rev A	Test Plan SRM Segment and Railcar Unit Scanner/Recorder and Instrumentation Evaluation Test	Sept 87	2	U
5-6	HQ301	WTP-0109 Rev A	Test Plan System Tunnel Aluminum Floor Plate Hydroproof	04-20-88	2	U
5-6	HQ301	WTP-0110 Rev A	RSRM Joint Pin Retainer Band	Oct 87	2	U
5-6	HQ301	WTP-0113	Test Plan for Seventy Pound (SPC) Subscale Motor Full-Scale Thickness SRM Joint (Phase II)	Sept 87	2	U
5-6	HQ301	WTP-0115	Modified JPL Motor Development Test Plan for the NASA Phase II Shuttle Nonasbestos Insulation Test Program	July 87	2	U
5-6	HQ301	WTP-0117	Test Plan Thermalok T-Seal and Leak Check (JAD-3)	Sept 87	2	U
5-6	HQ301	WTP-0119 Rev A	T-97 Checkout Test Plan	Dec 87	2	U
5-6	HQ301	WTP-0120 Rev D	Joint Environment Simulator 3C (JES-3C)		2	U
5-6	HQ301	WTP-0121 Rev B	Girth Gage Qualification Test Plan	03/11/88	2	U
5-6	HQ301	WTP-0122	Gage Installation Adhesive M-Bond 200 Qualification Test Plan	Sept 87	2	U
5-6	HQ301	WTP-0123	Triaxial Accelerometer Assembly Qualification Test	Sept 87	2	U
5-6	HQ301	WTP-0125	Test Plan for Extending the Shelf Life of the SRM Pyrotechnic Basket Assembly	July 87	2	U
5-6	HQ301	WTP-0126 Rev A	RSRM Nozzle Foam Plug High Rate Pressurization Qualification Test Plan	01/18/88	2	U
5-6	HQ301	WTP-0127	Wind Tunnel Testing of the SRM Field/Factory Joints Including Heater Cables and Connectors	Oct 87	2	U
5-6	HQ301	WTP-0128 Rev B	RSRM Inlet Housing Structural Test, Qualification	Dec 87	2	U
5-6	HQ301	WTP-0129 Rev B	Nozzle Joint Assembly Demonstration-3 (NJAD-3)	03/09/88	2	U
5-6	HQ301	WTP-0134	Test Plan for the Pathfinder Exit Cone Severance Test	10/20/87	2	U
5-6	HQ301	WTP-0135	Test Plan for LVDT Pressure Housing Functional Test	10/30/87	2	U
5-6	HQ301	WTP-0136 C	Test Plan for Full Scale J-Seal Resiliency Test	May 1989	2	U
5-6	HQ301	WTP-0138 Rev B	Test Plan for Sub J-Seal Resiliency Test	04/15/88	2	U
5-6	HQ301	WTP-0142	Test Plan for Evaluating the Corr-Shield 736 Corrosion	04/01/88	2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
5-6	HQ301	WTP-0143 Rev A	Profile Measuring Device (PMD) - Pi Tape Referee Test	05/20/88	2	U
5-6	HQ301	WTP-0154 Rev A	Test Plan for the Process Checkout Flex Bearing	11/09/87	2	U
5-6	HQ301	WTP-0160	Test Plan, Leak Test to Develop Redundant and Verifiable Vent Port Plug Design on a Hydroproof Test	01/18/88	2	U
5-6	HQ301	WTP-0162	Test Plan for Full-Scale Process Evaluation of Insulation Edge Separation	Mar 88	2	U
5-6	HQ301	WTP-0163	Aging Studies to Determine the Effects of Isopropanol/Distilled Water Exposure on NBR	Mar 88	2	U
5-6	HQ301	WTP-0164	SRM Segment/Railcar Unit Scanner/Recorder and Instrumentation Test	02/05/88	2	U
5-6	HQ301	WTP-0166	Profile Measuring Device to Pi-Tape Referr Test No. 3		2	U
5-6	HQ301	WTP-0167	Nozzle Flex Boot Cavity Pressure Test Plan	04/13/88	2	U
5-6	HQ301	WTP-0168	Test Plan for Insulation Cure Control with Embedded Mold Ring Thermocouples	May 88	2	U
5-6	HQ301	WTP-0171	Test Plan for Long Term Vertical Stack Test	04/15/88	2	U
5-6	HQ404	WTP-0173	SRM Segment and Exit Cone/Railcar Unit Scanner/Recorder and Instrumentation Test Plan	05/20/88	2	U
5-6	HQ301	WTP-0176	Functional, Vibration and Burst Test of the 7U76368 Pressure Transducer Assembly Test Plan	June 88	2	U
5-6	48102	WTP-0177 B	Ozone and Strain Effects on Clevis Insulation	03/30/89	2	U
5-6	48102	WTP-0177 Rev A	Ozone and Strain Effects on Clevis Insulation	11/17/88	2	U
5-6	HQ301	WTP-0178	Test Plan for Igniter Adapter-To-Igniter Chamber Deflection Test	09/01/88	2	U
5-6	48102	WTP-0179	Phase II - Testing for Full-Scale Process Evaluation of Insulation Edge Separations	Oct 88	2	U
5-6	HQ301	WTP-0179	Test Plan Temperature and Humidity Effects on Silane Primer Bonds	03/24/88	2	U
5-6	HQ301	WTP-0180	Test Plan for JES-3C Interference Fit	10/10/88	2	U
5-6	HQ301	WTP-0220	Determination of Radial Expansion and Insulation Damage to Field Joint Protection System Resulting from Ascent Pressure	09/21/87	2	U
5-7	HQ301	TWR-18557	Case Reuse Demonstration Program Plan	07/06/88	2	U
6-1	1.4.2.4.1	TWR-10299	Consolidated Support Equipment Requirements	03/08/85	2	U
6-3	1.4.2.6.4	TWR-10575 Rev E	Operation and Maintenance Documentation Plan	12/15/80	1	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
7-1	1.4.2.6.4	TWR-10306 Rev I	Integrated Logistics Support Plan (Approved)	06/07/79	1	U
7-1	1.1.1.3.2	TWR-13880 Rev D	SRM Operational Logistics Support Plan	04/07/89	1	U
7-10	1.4.2.6.4	TWA-1066 Vol I Rev G	Space Shuttle SRM System Maintenance Analysis Document	01/17/89	2	U
7-10	1.4.2.6.4	TWA-1066 Vol II Rev G	Space Shuttle SRM Systems Maintenance Analysis Document, MSFC Ground Support Equipment, Transportation Support Equipment and Common Support Equipment	03/22/89	2	U
7-10	1.4.2.6.4	TWA-1066 Vol III	KSC Equipment		2	U
7-2	1.4.2.6.4	TWR-11510	Short Form Provisioning Parts List for STA-1 Motor	10/14/77	2	U
7-2	1.4.2.6.4	TWR-11521 Rev A	Short Form Provisioning Parts List for H77-0373	11/01/77	2	U
7-2	1.4.2.6.4	TWR-11529 Rev A	Short Form Provisioning Parts List for A77-0333	09/12/77	2	U
7-2	1.4.2.6.4	TWR-11568	Short Form Provisioning Parts List C77-0341	09/09/77	2	U
7-2	1.4.2.6.4	TWR-11583 Rev A	Short Form Provisioning Parts List for H77-0304	09/30/77	2	U
7-2	1.4.2.6.4	TWR-11841	Short Form Provisioning Parts List for H77-0384, P/N 8U50918-01		2	U
7-2	1.4.2.6.4	TWR-11842 Rev A	Short Form Provisioning Parts List for H77-0382, P/N 8U50914-01		2	U
7-2	1.4.2.6.4	TWR-11848 Rev A	Short Form Provisioning Parts List for H77-0343, P/N 8U50825		2	U
7-2	1.4.2.6.4	TWR-11853	Short Form Provisioning Parts List for Ahh-0414, P/N 8U50840-01	05/22/78	2	U
7-2	1.4.2.6.4	TWR-11947	Short Form Provisioning Parts List for H77-0405, P/N 8U51502-01		2	U
7-2	1.4.2.6.4	TWR-11948	Short Form Provisioning Parts List for H77-0405, P/N 8U51446		2	U
7-2	1.4.2.6.4	TWR-11953 Rev A	Short Form Provisioning Parts List for H77-0386, P/N 8U51445		2	U
7-2	1.4.2.6.4	TWR-11954	Short Form Provisioning Parts List for H77-0304, P/N 8U50813-01		2	U
7-2	1.4.2.6.4	TWR-11954	Short Form Provisioning Parts List		2	U
7-2	1.4.2.6.4	TWR-11957	Short Form Provisioning Parts List for H77-0382, P/N 8U50914-01		2	U
7-2	1.4.2.6.4	TWR-11958	Short Form Provisioning Parts List for Case Assy, Fwd Segments, Fwd Ctr Segments, Aft Ctr and Aft Segments, Model No. DTA-1, P/N 1U50380, and Model No. DTA-2, P/N 1U52025	08/08/78	2	U
7-2	1.4.2.6.4	TWR-11960	Short Form Provisioning Parts List for H77-0373, P/N 8U50917-01		2	U
7-2	1.4.2.6.4	TWR-11961	Short Form Provisioning Parts List for A77-0417, P/N 8U50832	08/08/78	2	U
7-2	1.4.2.6.4	TWR-11963	Short Form Provisioning Parts List for A77-0333, P/N 8U50847-01		2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
7-2	1.4.2.6.4	TWR-11966 Rev A	Short Form Provisioning Parts List for H77-0406, P/N 8U51503		2	U
7-2	1.4.2.6.4	TWR-11967 Rev A	Short Form Provisioning Parts List for H77-0400, P/N 8U51449		2	U
7-2	1.4.2.6.4	TWR-11973	Short Form Provisioning Parts List for H77-0397, P/N 8U51447-01		2	U
7-2	1.4.2.6.4	TWR-11975	Short Form Provisioning Parts List for H77-0399, P/N 8U51448-01		2	U
7-2	1.4.2.6.4	TWR-11983	Short Form Provisioning Parts List for H77-0318, P/N 8U50837		2	U
7-2	1.4.2.6.4	TWR-11991	Short Form Provisioning Parts List for H77-0330, P/N 8U50831		2	U
7-2	1.4.2.6.4	TWR-11999	Band Installation Kit, Pin Retainer SRM Model No. H77-0322, P/N 8U50842	12/12/78	2	U
7-2	1.4.2.6.4	TWR-12033 Rev A	Short Form Provisioning Parts List for H77-0325, P/N 8U50838		2	U
7-2	1.4.2.6.4	TWR-12034 Rev A	Short Form Provisioning Parts List Lifting Beam for H77-0354, P/N 8U51506	08/08/79	2	U
7-2	1.4.2.6.4	TWR-12040 Rev B	Short Form Provisioning Parts List Handling Unit, Case Disassembly Model H77-0371, P/N 8U51444	12/21/79	2	U
7-2	1.4.2.6.4	TWR-12053 Rev A	Short Form Provisioning Parts List for H77-0401, P/N 8U51508-01		2	U
7-2	1.4.2.6.4	TWR-12064	Short Form Provisioning Parts List for H77-0322, P/N 8U50842		2	U
7-2	1.4.2.6.4	TWR-12067 Rev B	Short Form Provisioning Parts List for Test Console, Safe and Arm Device, Model No. C77-0363, P/N 8U50364-01	09/07/79	2	U
7-2	1.4.2.6.4	TWR-12115	Short Form Provisioning Parts List for Handling Dolly, Igniter Case Model No. H77-0334, P/N 8U50834		2	U
7-2	1.4.2.6.4	TWR-12174 Rev C	Short Form Provisioning Parts List Handling Unit, Case Disassembly, Forward Skirt, SRM Model No. H77-0407, P/N 8U51504	12/19/79	2	U
7-2	1.4.2.6.4	TWR-12364 Rev A	Short Form Provisioning Parts List for Maintenance Kit, Nozzle Disassembly Rocket Motor, SRM Model No. H77-0355, P/N 8U51507	01/11/80	2	U
7-2	1.4.2.6.4	TWR-12372	Short Form Provisioning Parts List for Insulation Installation Kit, Splice Plate, Stiffener Ring, Rocket Motor Model No. A77-0426, P/N 8U50905-01		2	U
7-2	1.1.1.2	TWR-14246	Short Form Provisioning Parts List, Space Shuttle Rocket Motor Flight Set 12 through L017 and Subsequent Left and Right Motors		2	U
7-2	48102	TWR-17240 Rev E	Short Form Provisioning Parts List, Space Shuttle Solid Rocket Motor Flight Set 350X001 Left and Right Hand Motor	06/12/89	2	U
7-2	1.4.2.6.4	TWR11956	Short Form Provisioning Parts List for H77-0343, P/N 8U50825-01		2	U

PART 1

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
7-9	1.4.2.6.4	TWR-11851 Rev D	Optimum Repair Level Analysis (ORLA) Report	02/20/84	2	U
7-9	1.4.2.6.4	TWR-12134 Rev E	Optimum Repair Level Analysis (ORLA) Report for Space Shuttle Solid Rocket Motor Project Support Equipment	01/09/85	2	U



**Part 2**

**Operation and Maintenance Documents (DR 3-8)**

PART 2

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-8	1.1.1.2	TWA-1069-1 Rev G	Ground Handling Equipment, SRM Flight Set X023 and Subsequent (HPM), SRM Flight Set F001 and Subsequent (FWC)	09/02/87	2	U
3-8	1.1.1.2	TWA-1110 Rev H	Receiving Inspection, Off-Loading and Vertical Breakover of SRM Segments at the Launch Site Operation and Maintenance Documentation SRM Flight Set 360L003 and Subsequent	11/03/88	2	U
3-8	48102	TWA-1113 Rev M	Installation of Stiffener Rings on SRM Aft Segments Operation and Maintenance Documentation SRM Flight Set 360008 and Subsequent	06/05/89	2	U
3-8	48102	TWA-1122 Rev J	Safety and Arming Device Operation and Maintenance Manual SRM Flight Set 360L009 and Subsequent	Aug 1989	2	U
3-8	HQ202-10-10	TWA-1123 Rev F	Aft Nozzle Exit Cone Assembly Installation Operation and Maintenance Manual SRM Flight Set 360L001 through 360L006	03/28/88	2	U
3-8	48	TWA-1126 Rev D	Rocket Motor Solid Ring Cover Assembly Removal/Installation Operation and Maintenance Manual 360L005 and Subsequent	02/17/89	2	U
3-8	1.1.1.2.3	TWA-1129 Rev H	Mixing Instruction for Two-Part Adhesives and Sealants in SEMCO Cartridges Operation and Maintenance Manual SRM Flight Set 12 and Subsequent	02/04/88	2	U
3-8	1.1.1.2.3	TWA-1130 Rev K	Mate SRB Field and Skirt Joint (Aft/Aft Center/Forward Center/Forward Segments) Operation and Maintenance Manual 330L016 and Subsequent		2	U
3-8	FN301	TWA-1134 Rev A	Mate SRB FWC Field and Skirt Joints Operation and Maintenance Documentation SRM Flight Set F001 and Subsequent (FWC)	07/16/86	2	U
3-8	1.1.1.2.3	TWA-1143 Rev H	Separate Solid Rocket Motor Field and Skirt Joints Operation and Maintenance Manual SRM Flight Set 12 and Subsequent	11/06/88	2	U
3-8	FN301	TWA-1171 Rev C	Systems Tunnel Cover SRM Flight Set F001 and Subsequent	03/19/86	2	U
3-8	HQ202-10-10	TWA-1189 Rev H	Rocket Motor Exit Cone and Exit Cone Fragment Shipping Kit Model P77-0303 Operation and Maintenance Manual SRM Flight Set 360L003 and Subsequent	11/03/88	2	U
3-8	1.1.1.2.3	TWA-1195 Rev F	FRF Nozzle Cover (C77-0439) Operation and Maintenance Manual	11/18/88	2	U
3-8	1.1.1.2.3	TWA-731	Operation and Maintenance Manual, SRB Structural Test Article (STA-2) Assembly at Test Site (MSFC)	08/14/84	2	U
3-8	1.1.1.2	TWA-746 Rev A	Insulated Stiffener Ring Installation Modification	10/11/85	2	U
3-8	FN301	TWA-754	Storage of DFI Cables on Motor Segment Prior to Motor Build-Up and Installation of Calbes During	08/14/85	2	U

PART 2

DR NO. ===	WBS NUMBER =====	DOCUMENT NUMBER =====	DOCUMENT TITLE =====	DOCUMENT DATE =====	TYPE =====	SEC CLASS =====
3-8	HQ301	TWA-793 Rev A	STA-3 Handling Procedures Operation and Maintenance Documentation	07/17/87	2	U

Part 3

Photographed and Motion Picture Film Clips (DR 1-13)

PART 3 -- PHOTOGRAPHS, MOTION PICTURE FILMS AND VIDEOS

DR NO.	TITLE/ SUBJECT =====	SUBMITTAL DATE =====	ROLL/ VIDEO NUMBER =====	NEGATIVE NUMBERS =====
1-13	2,500 Ton Press	Sep 76		56123-3
1-13	225-Ton Bridge Crane at Corinne	Aug 80	5955	
1-13	225-Ton Bridge Crane at Corinne, Utah	Aug 80		66726-1 66726-3 66726-5 66726-6
1-13	Aerial Views of H-7 SRM Refurbishment facility	Sep 83		76187-4 76187-8 76187-10 76187-10
1-13	Aft Exit Cone Attachment to DM-1	Jul 77		59056-1 59056-4 59056-5 59078-1 59078-4
1-13	Aft Exit Cone Attachment to DM-1	Jul 77	5315	
1-13	Aft Quench System	Nov 78	5561	
1-13	Aft Segment Instrumentation	Aug 82		72495-4 72495-9 72495-10 72495-10
1-13	Aft Thrust Stand Installation at Test Bay T-24	Jun 77	5291	
1-13	Aft Thrust Stand Installation at Test Bay T-24	Jun 77		58739-1 58739-2 58740-1 58740-1 58740-2 58740-5
1-13	Assemble Casting Segment	Oct 76		57637-3 57637-4 57637-5 57637-5 57637-6
1-13	Assemble Casting Segment	Oct 76	51298	
1-13	Autoclave	Sep 76		57292-1
1-13	* Boot Load & Nozzle Nose Inlet Housing Structural Tests	07/25/88		97843-1 97843-2 97843-3 97843-3 97941-3 97964-6 98130 98130-3 98232-1 98353-1 98353-2 98353-3
1-13	* Boot Load & Nozzle Nose Inlet Housing Structural Tests	07/25/88		98622-2 98622-3 100021-1 100021-1 100090-1 101253-3 101253-4 101253-5 101471-1 101471-3 101471-5 101471-6
1-13	* Boot Load & Nozzle Nose Inlet Housing Structural Tests	07/25/88		101472-3 101472-5 101472-8 101472-8 101472-11 101601-1 102739-1 102739-2 102739-3 102739-4 102785-1 102785-4
1-13	* Boot Load & Nozzle Nose Inlet Housing Structural Tests	07/25/88		102873-1 102873-2 102873-3 102873-3 103083-1
1-13	* Boot Load & Nozzle Nose Inlet Housing Structural Tests	Nov 77		59702-1 59702-2 59702-3 59702-3 59702-4
1-13	Breakwire - SRM Nozzle Boot for DM-2			

PART 3 -- PHOTOGRAPHS, MOTION PICTURE FILMS AND VIDEOS

DR NO.	TITLE/ SUBJECT	SUBMITTAL DATE	ROLL/ VIDEO NUMBER	NEGATIVE NUMBERS
1-13	Building M-113 Modification	Oct 76	5127A	
1-13	Building M-113 Modification	Oct 76		57670-1 57668-1 57669-1 57669-1
1-13	Casting Facility Checkout	Jun 84		79167-2 79167-5 79167-8 79167-8 79167-9 79167-15 79167-17 79167-18 79167-19
1-13	Checkout 124-in. Vertical Boring Mill	Dec 76	5165	
1-13	Checkout 166-in. Vertical Boring Mill	Nov 76	5139	
1-13	Checkout Breakover Tool With Weight Slug	Feb 77	5208	
1-13	Checkout Hydroclave, Building M-113	Nov 76	5138	
1-13	Checkout of 124-in. Vertical Boring Mill	Feb 77		57872-2 57872-3 57872-4 57872-4 57872-5
1-13	Checkout of 166-in. Vertical Boring Mill	Nov 76		5774-1
1-13	Checkout of Breakover Tool With Weight Slug	Nov 76		58142-1 58142-2 58142-3 58142-3 58142-4 58142-7 58142-9 58142-10 58142-11 58142-12
1-13	Checkout of Hydroclave - Building M-113	Nov 76		57741-1 57741-2
1-13	Construction Activities at Test Bay 5-24	Oct 76		57671-1 57671-2 57671-3 57671-3 57671-4
1-13	Construction Activities at Test Bay 1-24	Oct 76	5127C	
1-13	Construction Activities at the Large Motor Casting Complex	Oct 76		57667-1 57668-1 57669-1 57669-1
1-13	Construction Activities at the Large Motor Casting Complex	Oct 76	5127B	
1-13	DA-007 Helical Cutting	Aug 84		84C-3844 84C-3845 84C-3846 84C-3846 84C-3847 84C-3849
1-13	DA-007 Move to Oven	Aug 84		84C-3837 84C-3838 84C-3839 84C-3839
1-13	DF-001 Full Length Segment Fabrication	Aug 83		83C-2050 83C-2051 83C-2052 83C-2052 83C-2611 83C-2613 83C-2614 83C-2615 83C-2616 83C-2618 73C-2619 73C-2620
1-13	DF-001 Full Length Segment Fabrication	Aug 83		83C-2621

PART 3 -- PHOTOGRAPHS, MOTION PICTURE FILMS AND VIDEOS

DR NO.	TITLE/ SUBJECT	SUBMITTAL DATE	ROLL/ VIDEO NUMBER	NEGATIVE NUMBERS
1-13	DF-001 Full Length Segment Fabrication	Aug 83	HI No. 9	
1-13	DF-001 Mandrel Extraction, Prop Measurement & Lathe Machining	Sep 83		83C-2622 83C-2986 83C-3061 83C-3062 83C-3064 83C-3067
1-13	DF-001 Mandrell Extraction Prop Measurement and Lathe Machining	Sep 83	HI No 11	
1-13	DF-001 ROTAB Drilling and SUTRA Inspection - TFS 2-3 Assembly and Hydrotest	Oct 83	HI No 12	
1-13	DF-001 ROTAB Drilling and SUTRA Inspection TFS 2/3	Oct 83		83C-3063 83C-3065 83C-3066 83C-4320 83C-4322 83C-4323 83C-5273 83C-5274 83C-5275
1-13	DM-2 Exit Cone Severance Test	Mar 78		60539-1 60540-1 60573-1 60573-2 60573-4
1-13	DM-3 Static Test	Nov 78	5562	
1-13	DM-5 Arrival by Super Guppy	Jun 82	6258	
1-13	DM-5 Skirt Arrival By Super Guppy	Jun 82		72381-1 72381-5 72381-11 72381-13 72381-16 72381-24 72381-25 72381-30 72381-31 72381-41 72381-44
1-13	DM-7 Aft Segment Transport to 1-24	Jul 85		84060-12 84060-13 84060-3 84060-4
1-13	DM-7 Static Test Firing	Jul 85		84659-18 84659-4 84659-12 84659-12 84953-4 84942-1 84940-6 84952-2 84973-5A 84989-4 84989-5 84989-7
1-13	DM-7 Static Test Firing	Jul 85	6755	
1-13	* DM-8 Static Test	09/28/87	Video	
1-13	* DM-9 Static Test	02/04/87	Video	
1-13	Data Acquisition System Checkout Test Bay 1-24	Jul 77	5328	58962-1 58964-4 58964-5 58964-5 58964-6 59049-1
1-13	Data Acquisition System Checkout at Test Bay 1-24	Jul 77		
1-13	Decrease Case Segment	Oct 76		57636-1 57636-2 57636-3 57636-4 57637-2
1-13	Decrease Case Segment	Oct 76	5129A	

PART 3 -- PHOTOGRAPHS, MULTION PICTURE FILMS AND VIDEOS

DR NO. ==	TITLE/ SUBJECT =====	SUBMITTAL DATE =====	ROLL/ VIDEO NUMBER =====	NEGATIVE NUMBERS =====	
1-13	Delivery of First STS-1A Aft Segment	Aug 79	5788		
1-13	Delivery of STS-1A Aft Segment (First Segment Del to KSC)	Aug 77		64171-1 64172-1 64172-2 64172-2 64173-1 64173-3 64173-5 64173-6 64174-1 64174-2	
1-13	Empty Aft Casting Segment Removal From Assy Stand	Mar 77		57835-3	
1-13	* FJAF Installation Tests	02/22/88	Video		
1-13	FWC DA-006 Final Machining and Seal Coat	Aug 84		84C-3840 84C-3841 84C-3842 84C-3843 84C-3853	
1-13	FWC DA-007 Mandrel Extraction	Sep 84		84C-4179 84C-4180 84C-4181 84C-4181 84C-4182 84C-4184 84C-4185	
1-13	FWC DM-6 Install in Casting Pit	Aug 84		79871-1 79871-2 79871-3 79871-3 79871-4	
1-13	FWC DM-6 Transport and Install Fwd Segment in Test Bay 1-24	Sep 84	6632		
1-13	FWC DM-6 Transport and Install in Test Bay 1-24	Aug 84		79872-1 79872-2 79872-3 79872-3 79872-4 79872-6 79872-7 79872-8 79936-1 79936-2	
1-13	FWC DM-6 Transport to Large Motor Casting Pits	Aug 84		79870-1 79870-2 79870-3 79870-3 79870-4	
1-13	FWC DM-6, Attach Breakover Hardware	May 84		78938-1	
1-13	FWC DM-6, Attaching Adapter Rings	May 84		78881-1	
1-13	FWC DM-6, Clean and Mast FWC Near Adapter Rings	May 84		78938-1 78938-2	
1-13	FWC DM-6, Instll. of Rubber Insulation on Case Diameter	May 84		78904-1 78904-2 78904-3 78904-3	
1-13	FWC DM-6, Preparing Adapter Rings for Installation	May 84		78893-1 78893-2 78893-3 78893-3 78893-4	
1-13	FWC Mandrel Arrival, Broadgoods Application, Helical Winding and Mandrel Extrusion	Jun 84	HI No 14		



PART 3-- PHOTOGRAPHS, MOTION PICTURE FILMS AND VIDEOS

DR NO. ===	TITLE/ SUBJECT =====	SUBMITTAL DATE =====	ROLL/ VIDEO NUMBER =====	NEGATIVE NUMBERS =====	
1-13	FUC NDE and Measurement System	Sep 83		83C-2572 83C-2573 83C-2048 83C-2049 83C-2985	
1-13	FUC Pathfinder (DF-001) Breakover Into Assembly Stand	May 84		78661-1 78661-2 78661-3 78661-3	
1-13	FUC Pathfinder Vacuum Bagging Operation	May 84		78776-1 78776-2	
1-13	FUC Pathfinder Hydrotest Facility Checkout	May 84		78938-1 78938-2	
1-13	FUC Pathfinder, Vertical Lift to Casting Pit	Jun 84		79054-1 79054-2	
1-13	FUC QC-2 Installation of Accelerometer Brackets	May 84		78701-1 78701-2	
1-13	FUC QS-2 Hydroproof, Cutting Helical Layers of DA-004, DA-001 Assembly and Hydrotest	Nov 83	HI No 13		
1-13	FUC QS-2 Hydroproof, Cutting Helical Layers on DA-004	Nov 83		83C-5473 83C-5533 83C-5553 83C-5553 83C-5764	
1-13	FUC QS-2 Inert Casting	May 84	6559-2		
1-13	FUC QS-2 Inert Casting, Installation and Tooling	May 84		78519-1 78519-3 78519-4 78519-4 78670-1 78670-6	
1-13	FUC QS-2 Inert Core - Pop, Stacking and Transport	May 84		78661-1 78661-2 78661-3 78661-3 78662-1 78662-6 78662-8 78662-12 78662-14	
1-13	FUC QS-2 Inert Propellant Casting	May 84		78660-2 78660-4 78660-6 78660-6 78660-8	
1-13	FUC QS-2 Motor Sell-Off	May 84		78673-1	
1-13	FUC QS-2 Motor Shipment	May 84		78702-1	
1-13	FUC STA-2, Check Strain Gages and O-ring	Jun 84		79263-1 79263-2 79263-3 79263-3 79263-4	
1-13	FUC STA-2, Hydrotest STA-2 Forward Segment	Jul 84		79803-1 79803-2 79803-3 79803-3 79803-4 79803-6 79803-7 79803-8	
1-13	FUC STA-2, Install forward Dome on Forward Cylinder	May 84		78941-1 78941-2 78942-1 78942-1 78942-3	

PART 3 -- PHOTOGRAPHS, MOTION PICTURE FILMS AND VIDEOS

DR NO.	TITLE/ SUBJECT	ROLL/ SUBMITTAL VIDEO DATE	NEGATIVE NUMBERS	
1-13	FUC STA-2, Install Internal Strain Gages	Jun 84	79260-1 79260-2 79260-3 79260-4	
1-13	FUC STA-2, Internal Instrumentation	Jun 84 66028		
1-13	FUC STA-2, Lay Wires and Tracks on Strain Gages	Jun 84	79259-1	
1-13	FUC STA-2, Receiving Inspection of Aft Cylinder	May 84	78964-1	
1-13	FUC TFS 2/3 Bladder Layup for Hydrotest	Nov 83	77098-5 77097-1 77097-2 77097-5 77099-1 77099-2 77099-3	
1-13	FUC TFS 2/3 Bladder Layup for Hydrotest	Nov 83 6490		84C-2682 84C-2683 84C-2684 84C-2685 84C-2687 84C-2688 84C-2689 84C-2690 84C-2691 84C-3048 84C-3049
1-13	FUC Test Assembly Stress Relief Cycle, DC-003, -004, -005	Jul 84	84C-2670 84C-2671 84C-2672 84C-2673 84C-2675 84C-2676 84C-2677 84C-2678 84C-2679 84C-2680 84C-2681	
1-13	FUC Test Assembly Stress Relief Cycle, DC-003, -004, -005	Jul 84		85840-1 85841-1 85842-1 85842-2 85842-5 85843-2 85843-3 85843-4 85843-5
1-13	FUC-SRM Bottom Discharge Casting Operation	Aug 85 6790		
1-13	FUC-SRM Bottom Discharge Casting Operations	Aug 85		
1-13	FUC-SRM Development and Qualification	Feb 83 FUC-2		
1-13	FUC-SRM Development and Qualification	Apr 83 FUC-5		
1-13	FUC-SRM Development and Qualification	Feb 83 FUC-3		
1-13	FUC-SRM Development and Qualification	Apr 83 FUC-4		
1-13	FUC-SRM Development and Qualification Program	Apr 83	83C-457 83C-459 83C-460 83C-460 83C-461 83C-463 83C-464 83C-468 83C-470 83C-582 83C-583 83C-584	
1-13	FUC-SRM Development and Qualification Program	Feb 83	82C-30 82C-31 82C-32 82C-32 82C-33 83C-21 83C-22 83C-23 83C-24 83C-25 83C-26 83C-27	
1-13	FUC-SRM Development and Qualification Program	Feb 83	83C-28 83C-29 83C-30 83C-30	
1-13	FUC-SRM Development and Qualification Program	Feb 83		

**PART 3 -- PHOTOGRAPHS, MOTION PICTURE FILMS AND VIDEOS**

DR NO.	TITLE/ SUBJECT =====	SUBMITTAL DATE =====	ROLL/ VIDEO NUMBER =====	NEGATIVE NUMBERS =====
1-13	FUC-SRM Development and Qualification Program	Apr 83		82C-3506 82C-3507 83C-31 83C-31 83C-36 83C-290 83C-291 83C-302 83C-303 83C-304 83C-452 83C-453
1-13	FUC-SRM Development and Qualification Program	Apr 83		83C-445 83C-446 83C-447 83C-447 83C-448 83C-450 83C-451 83C-452 83C-453 83C-454 83C-455 83C-456
1-13	FUC-SRM Development and Qualification Program	Apr 83		83C-585 83C-588 83C-589 83C-589
1-13	FUC-SRM Development and Qualification Program	Feb 83		83C-174 83C-150 83C-152 83C-152 83C-153 82C-23 82C-24 82C-25 82C-26 82C-27 82C-28 82C-29
1-13	FUC-SRM Development and Qualifications	Dec 82		82C-3092 82C-3091 82C-2085 82C-2085 82C-3089
1-13	FUC-SRM Transport FUC to Railroad	Aug 85		85684-1 85684-5 85684-9 85684-9 85684-11 85684-13 85684-14 85650-3 85650-5
1-13	FUC-VLS-1 Segment DC-009 at Bldg M-111, MTI	Mar 85		82754-1 82754-2
1-13	Fabrication of Low Cost Test Nozzle (Subscale) for FUC	Feb 83		73537-5 73537-6 73552-3 73552-3 73552-4 73587-4 73601-1 73658-4 73658-8 74023-1 74027-2 74517-4
1-13	fabrication of Low Cost Test Nozzle (Subscale) for FUC	Feb 83		74714-2
1-13	Fabrication of Low-Cost Test Nozzle (Subscale) for FUC	Feb 83	6313	
1-13	Field Joints, DM-1, Test Bay T-25	Jun 77		58861-1 58861-2 58861-3 58861-3 58861-4
1-13	First SRM Segment Moved to T-77 Storage Complex	Mar 79		63029-6 63029-7 63029-8 63029-8 63029-9
1-13	GTM-5 Rail Coupling Test	Sep 78	5531	
1-13	GTM-5 Rail Coupling Test	Sep 78		61574-3 61574-4 61574-6 61574-6 61574-10
1-13	Grit Blasting for SRM Systems Tunnel	Nov 80		67477-1 67477-2 67477-3 67477-3 67477-4
1-13	H-7 Refurbishment Facility Modification	Feb 83	6384	
1-13	H-7 Refurbishment Facility Modification	Feb 83		83C-174 83C-150 83C-14 83C-14 83C-15 83C-21 83C-23

PART 3 -- PHOTOGRAPHS, MOTION PICTURE FILMS AND VIDEOS

DR NO.	TITLE/ SUBJECT *****	SUBMITTAL DATE *****	ROLL/ VIDEO NUMBER *****	NEGATIVE NUMBERS *****
1-13	H-7 Refurbishment Facility Modification	Aug 83	6384-3	
1-13	Heat Treat Furnace at Cal Doran, Los Angeles, CA	Jan 78	5397C	
1-13	Heat Treat Furnaces at Cal Doran, Los Angeles, CA	Dec 77		59895-1 59895-2
1-13	Highlight of DM-4 Static Test	Feb 79	5651	
1-13	Highlights of DM-4 Static Test	Feb 79		62020-1 62734-5 62735-5 62735-5 62740-3 62741-9 62742-31 62747-8 62750-6 62769-3
1-13	Hydrotesting SRM Igniter Adapter and Main Chamber Assemblies	Sep 76		57397-1 57534-2
1-13	Inert Casting Operations	Jun 78	5484	
1-13	Inert Mixing Operations	Jun 78	5481	
1-13	Inert Mixing Operations	Jun 78		61059-1 61059-2 61059-3 61059-3 60898-1 60898-3 60898-4 61060-1
1-13	Install Aft Skirt and Exit Cone	Nov 78	5548	
1-13	Install Linear Shaped Charge on Exit Cone	Oct 85		85434-1 85473-2 85474-2 85474-2
1-13	Install Nozzle Plug	Jan 79		62020-1
1-13	Install Nozzle Plug	Nov 78	5562A	
1-13	Installing Wasatch Division's First Computer Controlled Boot	Feb 84		77443-2 77443-4 77443-5 77443-5 77443-6 77443-12
1-13	Installing Wasatch Division's First Computer Controlled Industrial Robot	Feb 84	6518-1	
1-13	Instrumentation of Structural Test Article (STA-1)	Mar 77		58374-2 58374-3 58374-4 58374-4
1-13	Instrumentation of Structural Test Article STA-1	Mar 77	5240	

PART 3 -- PHOTOGRAPHS, MOTION PICTURE FILMS AND VIDEOS

DR NO.	TITLE/ SUBJECT =====	SUBMITTAL DATE =====	ROLL/ VIDEO NUMBER =====	NEGATIVE NUMBERS =====
1-13	* JAD Test (JAD-3)	02/11/88	Video	
1-13	JAD-2 (Case Joint Assembly Demonstration)	Jun 87		96083-1 96083-2 96114-2 96114-2 96302-1 96519-1 96519-2 96537-1 96537-2 96537-3 96537-4
1-13	* JES Test (JES-3A)	08/25/87	Video	
1-13	JES-1A	Sep 86	Video	
1-13	JES-1B Static Test	Nov 86		92684-7 92684-9 92684-11 92684-12
1-13	JES-1B Static Test	Nov 86		93047-1 93010-1 93009-1 93009-1 93009-3 93009-9 92684-1 92684-2 92684-3 92684-4 92684-5 92684-6
1-13	JES-1B Static Test	Nov 86		93200-8 93200-12 93212-1 93212-1 93212-5 93013-8 93013-2 93013-4 93013-5 93015-20 93014-6 93014-1
1-13	JES-1B Static Test	Nov 86		93012-6 92711-1 92711-2 92711-2 92711-3 92711-6 92711-7 93309-1 93068-1 93068-2 93068-3 93068-4
1-13	JES-2A Assembly and Static Test	Jan 87		92986-1 92986-2 92986-9 92986-14 93492-1 93492-2 93492-4 93508-3 93508-4 93651-1 93651-2
1-13	JES-2A Assembly and Static Test	Jan 87		93651-3 93466-4 93466-5 93466-5 93855-1 93855-3 93856-1 93856-2 93856-3 93856-4 93856-6 93856-7
1-13	JES-2A Assembly and Static Test	Jan 87		93856-8 93856-9 92857-1 92857-1 92857-2 92857-4 92857-5 92857-6 92857-7 93898-3 93899-11 93903-1
1-13	JES-2A Assembly and Static Test	Jan 87		93903-2 93903-3 94085-31 94085-31 94202-1 94202-3 94202-4
1-13	JES-2B Static Test	Mar 87		94688-1 94688-2 94688-3 94688-3 94688-4 94688-6 94688-7 94688-8 94688-9 94777-1 94777-2 94777-3
1-13	JES-2B Static Test	Mar 87		94777-4 94777-5 94777-5 94777-5 94777-7 94808-1 94808-2 94884-1 94884-2 94885-1 94891-1 94891-2
1-13	JES-2B Static Test	Mar 87		94891-4 94891-5 94891-6 94891-6 94945-1 94945-5
1-13	JES-2B Static Test	Mar 87	Video	
1-13	* JES-3B Static Test	12/15/87	Video	
1-13	* JES-3B Testing & Assembly	12/21/87		98670-1 98670-2 98670-6 98670-6 98670-7 99320-2 99320-3 99514-1 99514-3 99514-5 99521-1 99521-3
1-13	* JES-3B Testing & Assembly	12/21/87		99587-1 99587-5 99620-1 99620-1 99634-1 99634-4 99634-6 99662-1 99662-2 100113-1 100133-3 100134-1
1-13	* JES-3B Testing & Assembly	12/21/87		100134-2 100220-1 100220-2 100220-2 100220-3 100327-3 100327-4 100221-1 100221-2
1-13	* JES-3C Static Test	08/05/87	Video	
1-13	* JES-3C Testing & Assembly	08/03/88		101890-2 101890-3 101890-4 101890-4 102062-3 102170-2 102231-2 102465-1 102465-2 102657-1 102657-3 102882-8
1-13	* JES-3C Testing & Assembly	08/03/88		102882-9 102883-1 102883-2 102883-2 102894-1 104829-1 104829-2

## PART 3 -- PHOTOGRAPHS, MOTION PICTURE FILMS AND VIDEOS

DR NO.	TITLE/ SUBJECT =====	SUBMITTAL DATE =====	ROLL/ VIDEO NUMBER =====	NEGATIVE NUMBERS =====
1-13	Joint Assembly Demonstration (JAD-18 and JAD-2 Revision)	Jun 87	Video	
1-13	Joint Assembly Demonstration (JAD-18 and JAD-2)	Jun 87	Video	
1-13	LMCP Incident South Row	Apr 84	6560	78293-1 78293-6 78293-15 78293-18 78293-21 78296-25 78296-43 78297-5 78297-15 78297-43
1-13	LMCP Incident, South Row	Apr 84		
1-13	LMCP North Shelter Construction	Feb 84	6461-3	
1-13	LMCP North Shelter Construction, Part 3	Feb 84		77330-7 77330-8 77331-9 77331-9 77332-1 77332-3 77332-6 77332-7 77332-8 77332-9
1-13	Large Motor Casting Pits (LMCP) Facility Progress	Jun 84		79043-1 79043-2 79043-3 79043-3 79043-4 79043-6 79043-7 79043-9
1-13	Large Motor Casting Pits (LMCP) Facility Progress	Jun 84	6593-1	
1-13	Large Motor Casting Pits Shelter Construction (Phase 1)	Sep 83	6461-1	
1-13	Large Motor Casting Pits Shelter Construction (Phase 1)	Sep 83		76250-1 76250-5 76250-6 76250-6 76250-7 76250-10 76250-12 76250-13 76250-14
1-13	Layup Primary Chamber Insulation, Prop. Stress Relief Flaps	Mar 77		58241-1 58241-2 58241-3 58241-3 58241-4 58241-6
1-13	Lightweight SRM Case Hydroburst Test	Oct 80	5987	
1-13	Lightweight SRM Case Hydroburst Test	Oct 80		67324-1 67324-2 67324-3 67324-3 67324-4 67333-2 67399-1 67399-3 67407-1
1-13	Live SRM Segment Washout at T-24	Sep 83		76568-2 76568-3 76568-4 76568-4 76568-7 76568-10 76568-14 76568-15
1-13	Live SRM Segment Washout at T-24	Sep 83	6463	
1-13	M-115 Robot Washout Demonstration	Jun 84		79044-1 79044-2
1-13	M-115 Robot Washout Demonstration	Jun 84	6518-3	

PART 3 -- PHOTOGRAPHS, MOTION PICTURE FILMS AND VIDEOS

DR NO. ==	TITLE/ SUBJECT =====	SUBMITTAL DATE =====	ROLL/ VIDEO NUMBER =====	NEGATIVE NUMBERS =====
1-13	* M-197 Large Motor X-Ray Facility	07/27/88		98008-3 98008-4 98136-2 98136-2 98136-3 98412-1 98672-2 98672-4 98672-11 99068-1 99068-2 99068-3
1-13	* M-197 Large Motor X-Ray Facility	07/27/88		96335-1 96808-1 96889-1 96889-1 96889-2 97335-2 97737-1 97737-2 97737-3 97862-1 97862-2 97862-3
1-13	* M-197 Large Motor X-Ray Facility	07/27/88		101979-1 101979-2 101979-4 101979-5 103587-1 103910-1 104263-1 104263-4 104263-5 104574-1 104574-2
1-13	* M-197 Large Motor X-Ray Facility	07/27/88		99527-1 99900-3 99900-4 99900-4 99889-1 100526-2 101066-4 101066-8 101066-91 101680-4 101680-9 101680 1
1-13	Manufacturing Flex Bearing	Nov 85		87690-1 87690-2 87690-4 87690-5 87690-11 87690-12 87690-13 87915-1
1-13	Modal Survey No. 2	May 87		94549-6 94549-7
1-13	Modal Survey No. 2	Mar 87		94330-1 94330-2 94330-3 94330-4 94330-6 94330-7 94549-1 94549-2 94549-3 94549-4 94549-5
1-13	Modification of Test Bay 5-24	Sep 76		57510-11
1-13	Morton Thiokol, Inc. Signs and Winter Exteriors	May 84	6556	
1-13	Morton Thiokol/Wasatch Division Plant Exteriors	Aug 76	5114	
1-13	Morton Thiokol/Wasatch Division Plantsite	Feb 77		50702-4 56914-1
1-13	Morton Thiokol/Wasatch Division Plantsite Exteriors	Oct 75	4862	
1-13	* NJES Test (NJES-3A)	03/11/88	Video	
1-13	NJES Test Facility	Mar 87	Video	
1-13	NJES-1 Hydroproof	Nov 86	Video	
1-13	NJES-1A Static Test	Jun 87	Video	
1-13	* NJES-28 Testing & Assembly	08/03/88		99086-1 99086-2 99086-3 99086-3 99221-1 99221-3 98571-3 98571-6 99574-1 99575-4 99631-1 99631-2
1-13	* NJES-28 Testing & Assembly	08/03/88		98727-1 98727-2 98727-3 98727-5 98727-10 98727-13
1-13	* NJES-3A Testing & Assembly	08/03/88		101737-1 101737-3 101737-4 101737-4 101881-1 102090-3 102090-7 102164-1 102164-2 102164-3 102164-4 102205 1
1-13	* NJES-3A Testing & Assembly	08/03/88		102203-7 102293-1 102293-2 102293-2 102293-3 102378-5 102419-10 102482-1 102482-10 102482-1 102482-19

PART 3 -- PHOTOGRAPHS, MOTION PICTURE FILMS AND VIDEOS

DR NO. ---	TITLE/ SUBJECT -----	SUBMITTAL DATE -----	ROLL/ VIDEO NUMBER -----	NEGATIVE NUMBERS -----
1-13	* MJES-3B Static Test	06/06/88	Video	
1-13	MJES-H 2B Hydroproof	Apr 87		95562-7 95562-8 95582-1 95582-4 95582-6 95582-7 95582-8 95881-1 95881-3
1-13	MJES-H 2B Hydroproof	Apr 87		95345-1 95345-2 95345-3 95345-4 95352-1 95352-3 95562-1 95562-2 95562-3 95562-4 95562-5
1-13	MJES-H No. 1 Hydroproof	Nov 86		92597-10 92597-6 92980-6 92980-1 93266-2 93266-6 92981-1 92981-2 92981-3 92981-4 93348-1
1-13	MJES-H No. 2 Hydrotest	May 87		94610-1 94611-1 94611-2 94611-4 94611-5
1-13	MJES-H No. 2 Hydrotest	May 87		94307-1 94307-2 93426-1 93426-2 94394-2 9446-1 9446-2 9446-4 9446-5 94494-1 94546-1
1-13	MJES-H No. 2 Hydrotest	Mar 87	Video	
1-13	MJES-H No. 2 Hydrotest	Apr 87		94672-1 94672-2 94672-3 94672-4 94672-6 94672-8
1-13	MJES-H No. 2 Hydrotest (Cycle 2)	Apr 87		
1-13	MJES-H No. 2B Hydroproof	Apr 87	Video	
1-13	MJES-H No. 1 Hydroproof	Nov 86		93331-2 93331-23 93331-18 93331-18 93331-5 93330-3 9231-10 92128-1 92597-3 92597-8 92597-7 92597-9
1-13	* MJES-H3 Hydroburst	08/24/88	Video	
1-13	North LMCP Shelter Construction, Part 2, Structural	Jan 84		76653-1 76653-2 76653-5 76653-5 76898-1 76898-3 76898-7 76898-8 76898-10 76898-11 76874-1 76874-3
1-13	North LMCP Shelter Construction, Part 2, Structural	Jan 84		76874-5 76874-9 76874-12 76874-12 77130-2 77130-4 77130-6 77130-7
1-13	North LMCP Shelter Construction, Part 2, Structural Assembly	Jan 84	64-61-2	
1-13	* Nozzle Joint Assy Demonstration	07/20/87	Video	
1-13	* Nozzle Joint Environment Simulator (MJES-3B)	07/25/88		103030-1 103030-3 103030-4 103030-4 103030-5 103659-2 103659-4 103659-9 103659-10 103659-1 103660-9
1-13	Nozzle Metal Parts Fabrication at Kaiser Aerotech, San Leandro, CA	Jan 78	53970	
1-13	Nozzle Parts Fabrication at Kaiser Aerotech	Dec 77		59896-1 59896-2 59896-3 59896-3 59896-4 59896-7 59896-8 59896-9 59896-10 59896-11 59896-12 59896-13
1-13	Nozzle Severance	Nov 78	5565	



PART 3 -- PHOTOGRAPHS, MOTION PICTURE FILMS AND VIDEOS

ORIGINAL PRICE IS  
OF POOR QUALITY

DR NO.	TITLE/ SUBJECT =====	SUBMITTAL DATE =====	ROLL/ VIDEO NUMBER =====	NEGATIVE NUMBERS =====
1-13	O-Ring Resiliency Test Program	Apr 87	Video	
1-13	Postfire DM-5: Transport and Weighing of Forward Segment	Dec 82	6361	
1-13	Postfire DM-5: Transport and Weighing of Forward Segment	Dec 82		75262-2 75262-3 74621-1 74621-1 74158-3
1-13	Primary Chamber Insulation, Propellant Stress Relief Flaps and Forward Facing	Mar 77	5226	
1-13	Process Verification Aft Casting Segment & Rollair Empty Seg	Feb 77		57871-3
1-13	QM-1 Static Test	Jun 79	5721	
1-13	QM-1 Static Test	Jun 79		63569-5 63528-7 63540-3 63540-3 63512-6 64569-8 63509-1
1-13	QM-2 Static Test	Oct 79		64360-3 64360-8 64361-1 64361-1 64361-2 64357-5 64378-8 64397-5 64410-1
1-13	QM-2 Static Test	Oct 79	5800	
1-13	QM-3 Nozzle Exit Cone Severance Test	Mar 80	5870	
1-13	QM-3 Static Test	Feb 80		65307-7 65308-22 65324-7 65324-7 65325-8 65331-8 65325-4 65325-2 65441-1
1-13	QM-3 Static Test	Feb 80	5871	
1-13	QM-4 Aft Segment Removal From Casting Pit No. 3	Jan 83		74590-1 74590-3 74591-3 74591-3 74591-5
1-13	QM-4 Aft Segment Removal From Casting Pit No. 3	Jan 83	6372	
1-13	QM-6 Static Test	04/29/88	Video	
1-13	QM-6 Static Test	04/22/88	7559	
1-13	QM-6 Testing & Assembly	06/06/88		102215-15 102373-1 102373-2 102373-2 102373-3 102382-3 102382-4 102489-4 103376-16 103377-2 103381-6 103382-1
1-13	QM-6 Testing & Assembly	06/06/88		103384-3 103385-5 103386-4 103386-4 103387-3
1-13	QM-6 Testing & Assembly	06/06/88		102373-2 102373-3 102382-2 102382-2 102382-3 102489-4 103376-16 103377-27 103381-6 103382-1 103384-3 103385-5

## PART 3 -- PHOTOGRAPHS, MOTION PICTURE FILMS AND VIDEOS

DR NO. ---	TITLE/ SUBJECT -----	SUBMITTAL DATE -----	ROLL/ VIDEO NUMBER -----	NEGATIVE NUMBERS -----
1-13	* QM-6 Testing & Assembly	06/06/88		103386-4 103387-3 100287-3 100287-3 100287-4 101908-1 101908-3 101908-5 102040-1 102140-3 102140-8 102215-1 102373-1
1-13	* QM-6 Testing & Assembly	06/06/88		100287-3 100287-4 100329-1 100329-1 101908-1 101908-5 102040-1 102140-3 102140-8 102215-1 102373-1
1-13	* QM-7 Static Test	07/01/88	7559	
1-13	* QM-7 Static Test	06/30/88	Video	
1-13	* QM-7 Testing & Assembly	07/25/88		102957-2 102962-4 103031-1 103031-1 103240-7 103240-11 103275-4 103275-5 103468-2 103468-3 103468-4 103506-1
1-13	* QM-7 Testing & Assembly	07/25/88		103506-3 103729-1 103729-2 103729-2 103748-1 103796-4 103796-5 103904-2 103974-4 103974-5 104020-1 104020-2
1-13	* QM-7 Testing & Assembly	07/25/88		100273-1 100273-2 100273-4 100273-4 100763-1 102483-6 102483-10 102564-1 102564-4 102805-1 102937-1 102957-1
1-13	* QM-7 Testing & Assembly	07/25/88		104309-7
1-13	* QM-7 Testing & Assembly	07/25/88		104278-9 104281-8 104283-8 104283-8 104288-4 104291-4 104291-6 104291-7 104294-22 104295-3 104297-5 104297-2
1-13	* QM-7 Testing & Assembly	07/25/88		101676-1 101676-2 101676-3 101676-3 101676-5 101676-8 101739-2 101739-3 102056-1 102056-2 102056-3
1-13	* RM-1 Testing & Assembly (T-97 Verification & Checkout)	04/19/88		
1-13	* RM-1 Testing & Assembly (T-97 Verification & Checkout)	04/19/88		100895-1 100895-5 100895-6 100895-6 100895-9 101038-2 101038-4 101038-5 101407-1 101407-2 101614-1 101614-4
1-13	* RM-1 Testing and Assembly (T-97 Verification & Checkout)	04/19/88		99687-1 99687-4 99687-7 99687-7 99687-8 99888-2 99888-3 99888-4 99888-7 99888-8 99901-1 100039-1
1-13	* RSRM PV-1	08/29/88	7656	
1-13	* RSRM Static Test Bay 1-97	11/11/87	Video	
1-13	Railcars and Transfer at Corinne, Utah	Jul 78		61331-1 61331-2 61331-3 61331-3 61331-5 61331-7 61331-8 61331-9
1-13	Receiving First SRM Case Segment at the MTL Wasatch Division	Sep 76		57514-3 57515-6 57517-32 57517-32 57518-24
1-13	Referee 28 Hydrotest and Modal Survey, SRM Center Segment	Feb 87	Video	
1-13	Referee 28 Test	Feb 87		92679-1 92679-3 92679-4 92679-4 92679-5 92679-8 92679-9 92679-11 92679-13 92679-14 92683-1 92683-3
1-13	Referee 28 Test	Feb 87		93979-12 93902-1 93902-2 93902-2 93912-1 93912-3 93912-4 93963-1 94089-1
1-13	Referee 28 Test	Feb 87		92683-4 92700-2 92700-5 92700-5 93979-2 93979-4 93979-5 93979-6 93979-7 93979-8 93979-10 93979-11

**PART 3 -- PHOTOGRAPHS, NOTION PICTURE FILMS AND VIDEOS**

DR NO.	TITLE/ SUBJECT	SUBMITTAL DATE	ROLL/ VIDEO NUMBER	NEGATIVE NUMBERS
1-13	Refurbish Metal Parts from Fired Motor, DM-1	Sep 77	59424-1	59424-2 59424-4 59424-4
1-13	Refurbishment Facility Modification, H-7	Aug 83	75903-2	75903-3 75903-4 75903-4 75903-5 75903-7 75903-9 75903-11 75903-13 75903-14
1-13	Refurbishment of Building H-7, Clearfield, Utah	Feb 84	77996-8	
1-13	Refurbishment of Building H-7, Clearfield, Utah	Feb 84	77997-1	77997-2 77997-3 77997-3 77997-3 77997-4 77997-6 77997-7 77997-8 77997-9 77996-1 77996-2 77996-7
1-13	Report for October	Oct 76	Video	
1-13	SRM - Transfer of Motor Segment to Railcar	Mar 80	68441-1	68441-2 68441-3 68441-3 68445-1 68445-3 68445-4 68445-5 68445-6
1-13	SRM - Transfer of Motor Segment to Railcar	Mar 81	6043	
1-13	SRM Aft Skirt	May 78	60796-1	60796-2 60796-4 60796-4 60749-2 60749-5 60749-9 60749-11 60749-13
1-13	SRM Alternate Materials Test Nozzle M-4	Sep 83	76401-1	76401-3 76401-7 76401-7 76401-9
1-13	SRM Alternate Materials Test Nozzle M-4 (Subscale Winding the Graphite Overwrap)	Sep 83	6455	
1-13	SRM Breakover Fixture	Sep 76	57841-3	57491-7
1-13	SRM Case External Protective Primer Coat	Mar 77	57680-3	
1-13	SRM Case Fabrication Complex	Mar 77	57834-1	
1-13	SRM Case Processing at Rohr Industries, Chula Vista, CA	Jan 78	5397A	
1-13	SRM Case Processing at Rohr Industries, Chula Vista, CA	Dec 77	59893-1	59893-2 59893-3 59893-3 59893-4 59893-6 59893-8 59893-12 59893-14 59893-15
1-13	SRM Case Refurbishment Facility H-7	Jul 84	79605-5	79606-1 79606-2 79606-2 79606-3 79608-1 79608-2 79610-1 79610-2 79611-1
1-13	SRM Case Refurbishment Facility H-7	Jul 84	79601-1	79601-2 79601-3 79601-3 79601-4 79604-1 79604-2 79604-3 79604-4 79605-1 79605-2 79605-4
1-13	SRM Center Segment Casting Core Mandrel		57492-1	

03/13/89

## PART 3 -- PHOTOGRAPHS, MOTION PICTURE FILMS AND VIDEOS

DR NO. ==	TITLE/ SUBJECT =====	SUBMITTAL DATE =====	ROLL/ VIDEO NUMBER =====	NEGATIVE NUMBERS =====				
1-13	SRM Center Segment Core Mandrel	Sep 76		57316-3	57290-6			
1-13	SRM DM-1 Cylindrical Segment Casting	Feb 77		58226-1	58226-2	58226-3	58226-4	58226-6
1-13	SRM DM-5 Aft Case Exit Cone Fabrication	Apr 80		72026-5	72026-9	72253-4	72253-7	
1-13	SRM DM-5 Aft Exit Cone Fabrication	Apr 82	6230					
1-13	SRM First Segment Moved to T-77 Storage Complex	Mar 79	5673					
1-13	SRM Flexible Bearing Assembly Operation	May 76	49878					
1-13	SRM Flexible Bearing Preparation Area	Mar 77		56676-28				
1-13	SRM Handling Equipment	Mar 77		58212-1				
1-13	SRM Handling Ring Assembly, Protective Rocket Motor Segment	May 77	5271					
1-13	SRM Handling Ring Railcar	Oct 85		87424-1	87424-7	87433-3	87433-3	87434-4
1-13	SRM Initiator Case Before and After Hydroburst Test	Sep 76		56314-2	56314-3			
1-13	SRM Internal Application of Chemlok Primer & Adhesive	Mar 77		57681-1	57681-2			
1-13	SRM JES-1 Assembly and Static Test	Aug 86		92090-1	92090-2	91780-3	91780-3	91780-13 91795-9 91795-11 92132-3 92134-5 92142-2
1-13	SRM JES-1 Assembly and Static Test	Aug 86		92073-1	92073-2	92073-3	92073-3	92131-2 92131-6 92131-7 92133-1 92133-2 92174-3 92075-4 92075-6
1-13	SRM Loaded Segment Storage Complex	01/14/88	Video					
1-13	SRM Nozzle Throat Ring Insulation Liner Glass Phenolic Wrap	May 76	4913A					
1-13	SRM Nozzle Throat Ring Insulation Liner Machining	May 76	4913B					

PART 3 -- PHOTOGRAPHS, MOTION PICTURE FILMS AND VIDEOS

DR NO. ==	TITLE/ SUBJECT =====	SUBMITTAL DATE =====	ROLL/ VIDEO NUMBER =====	NEGATIVE NUMBERS =====
1-13	SRM Nozzle Torque Characterization	Sep 76	5101	
1-13 *	SRM O-ring Studies at AEC	10/16/87	Video	
1-13	SRM Pre-Shipment of Test Assembly	Mar 77		58453-1 58453-2
1-13	SRM Prototype Bearing Characterization Testing			57150-4
1-13	SRM Prototype Flex Bearing	Sep 76		56867-5
1-13 *	SRM Redesign Update - August 87	09/30/87	Video	
1-13 *	SRM Redesign Update - Dec 1988	02/02/87	Video	
1-13 *	SRM Redesign Update - Feb 1988	04/06/87	Video	
1-13 *	SRM Redesign Update - Jan 1988	03/03/88	Video	
1-13 *	SRM Redesign Update - July 1987	08/25/88	Video	
1-13 *	SRM Redesign Update - June 1987	07/20/87	Video	
1-13 *	SRM Redesign Update - Mar/Apr 88	06/24/88	Video	
1-13 *	SRM Redesign Update - May 1988	07/01/88	Video	
1-13 *	SRM Redesign Update - October 1987	11/24/87	Video	
1-13 *	SRM Redesign Update - Sep 1987	10/19/87	Video	
1-13	SRM Redesign Update, April 1987	Apr 87	Video	
1-13	SRM Redesign Update, February 1987	Mar 87	Video	
1-13	SRM Redesign Update, January 1987	Feb 87	Video	





PART 3 -- PHOTOGRAPHS, MOTION PICTURE FILMS AND VIDEOS

DR NO.	TITLE/ SUBJECT	SUBMITTAL DATE	ROLL/ VIDEO NUMBER	NEGATIVE NUMBERS
1-13	I-97 Construction Progress	Apr 87		93485-1 93807-1 93913-1 93913-2 95510-2 95510-3 95510-4 95510-5 95510-6 95510-7
1-13	I-97 Construction Progress	Apr 87		95292-4 95292-6 95292-7 95292-8 95510-1 95510-2 95510-3 95510-4 95510-5 95510-6 95510-7
1-13	I-97 Construction Progress	Apr 87		94814-3 94814-6 94866-1 94866-1 94908-2 94908-7 94908-8 94908-9 94908-11 95037-2 95037-3 95037-5
1-13	I-97 Construction Progress	Apr 87		93749-1 94034-1 94253-1 94253-1 94253-3 94253-5 94774-1 94774-2 94774-3 94774-6 94814-1 94814-2
1-13	I-97 Construction Progress	Jul 83		83C-1232 83C-1233 83C-1234 83C-1234 83C-1235 83C-1906
1-13	I-97 Assembly for Hydrotest	Jul 83		83C-1220 83C-1221 83C-1222 83C-1222 83C-1223 83C-1225 83C-1226 83C-1227 83C-1228 83C-1229 83C-1230 83C-1231
1-13	I-97 Assembly for Hydrotest	Jul 83		83C-1780 83C-1781 83C-1782 83C-1782 83C-1783 83C-1785
1-13	I-97 12-ft Segment Fabrication	04/29/88	Video	
1-13	I-97 12-ft Segment Fabrication	02/29/88	Video	
1-13	I-97 12-ft Segment Fabrication	07/14/88	Video	
1-13	I-97 12-ft Segment Fabrication	Dec 86		93585-5 93585-6 93586-1 93586-1 93586-2 93586-5 93586-6 93587-1 93587-2 93588-1 93588-2 93588-3
1-13	I-97 12-ft Segment Fabrication	Dec 86		93595-4 93595-5 93596-1 93596-1 93596-3 93597-3 93597-4 93597-5 93598-1 93598-2 93598-3
1-13	I-97 12-ft Segment Fabrication	Dec 86		93581-1 93581-2 93582-2 93582-2 93582-3 93583-3 93583-4 93583-5 93583-8 93583-1 93584-1 93585-1
1-13	I-97 12-ft Segment Fabrication	Dec 86		93590-2 93591-1 93591-2 93591-2 93591-3 93592-2 93592-3 93592-4 93584-2 93584-3 93585-1 93585-3
1-13	I-97 12-ft Segment Fabrication	Dec 86		93599-1 93600-2 93600-3 93600-3 93600-4 93601-4 93002-1 93002-3 93002-4 93588-1 93588-3 93590-1
1-13	I-97 12-ft Segment Fabrication	Jan 79	5611	
1-13	I-97 12-ft Segment Fabrication	Feb 77		58202-1 58202-2
1-13	I-97 12-ft Segment Fabrication	06/06/88	Video	
1-13	I-97 12-ft Segment Fabrication	May 77	5279	
1-13	I-97 12-ft Segment Fabrication	03/11/88		101215-3 101241-1 101244-2 101244-2 101301-1 101327-1 101328-1 101329-2 101425-2 101426-2 101426-4 101426-5
1-13	I-97 12-ft Segment Fabrication			



03/13/89

## PART 3 -- PHOTOGRAPHS, MOTION PICTURE FILMS AND VIDEOS

DR NO. ==	TITLE/ SUBJECT =====	SUBMITTAL DATE =====	ROLL/ VIDEO NUMBER =====	NEGATIVE NUMBERS =====
1-13	* Transient Pressure Test Article (IPTA 1.2) Static Test	03/11/88		102076-6 102082-1 102082-2 102082-2 102082-3 102082-5 102084-1 102084-8 102165-23 102165-2 102166-26 102268-1
1-13	* Transient Pressure Test Article (IPTA 1.2) Static Test	03/11/88		101543-2 101543-3 101552-1 101552-2 101553-4 101533-7 101584-2 101663-4 101633-6 101985-1 102076-3
1-13	* Transient Pressure Test Article (IPTA 1.2) Static Test	03/11/88		102304-5 102304-6 102306-2 102306-20 102306-22 102307-3
1-13	* Transient Pressure Test Article (IPTA-1.2) Static Test	03/11/88		100806-6 100822-4 100822-5 100822-5 100846-1 101005-4 101005-1 101005-2 101006-2 101006-3 101215-1 101215-2
1-13	* Transient Pressure Test Article (IPTA-2.1) Static Test	07/25/88		102513-1 102514-5 102514-9 102514-9 102514-10 102602-3 102602-6 102603-3 102898-1 102897-4 102898-4 102989-6
1-13	* Transient Pressure Test Article (IPTA-2.1) Static Test	07/25/88		102921-1 102921-2 102921-3 102921-3 102923-3 102925-2 102925-3 102927-6
1-13	* Transient Pressure Test Article (IPTA-2.1) Static Test	07/25/88		101983-1 101983-4 101983-5 101983-5 102083-2 102210 102210-1 102210-3 102210-5 102389-3 102389-4 102389-9
1-13	* Transient Pressure Test Article (IPTA-2.2) Static Test	08/03/88		103880-17 103881-23
1-13	* Transient Pressure Test Article (IPTA-2.2) Static Test	08/03/88		103290-2 103292-1 103292-4 103292-4 103293-3 103539-2 103539-3 103539-5 103541-1 103541-3 103771-1 103771-2
1-13	Transport Aft Casting Segment DM-1 to Test Bay T-24	Jun 77	5309	
1-13	Transport Aft Casting Segment DM-1 to Test Bay T-24	Jun 77		58857-1 58868-1 58869-1 58869-1
1-13	Transport Cylindrical Segment DM-1 to Test Bay T-24	Jun 77		58801-1 58801-2 58801-3 58801-3
1-13	Transport Cylindrical Segment DM-1 to Test Bay T-24	Jun 77	5313	
1-13	Transport and Install Forward Segment DM-1 to Test Bay T-24	Jun 77	5298	

PART 3 -- PHOTOGRAPHS, MOTION PICTURE FILMS AND VIDEOS

DR NO.	TITLE/ SUBJECT	SUBMITTAL DATE	ROLL/ VIDEO NUMBER	NEGATIVE NUMBERS	
1-13	Transport and Install fwd Segment DM-1 to Test Bay T-24	Jun 77		58866-1 58866-2 58866-3 58866-3 58866-4 58866-6 58866-7 58866-8 58866-9 58866-10	
1-13	Video Report for November	Nov 86	Video		
1-13	Washout Forward Casting Segment DM-1	Aug 77		59304-1 59304-2 59304-6 59304-6 59304-7	
1-13	Winding FWC 1/4 Scale Case	Dec 82	FWC 1		

THIS CASE IS  
OF HIGH QUALITY

